

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	01031-2	COOK	27	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

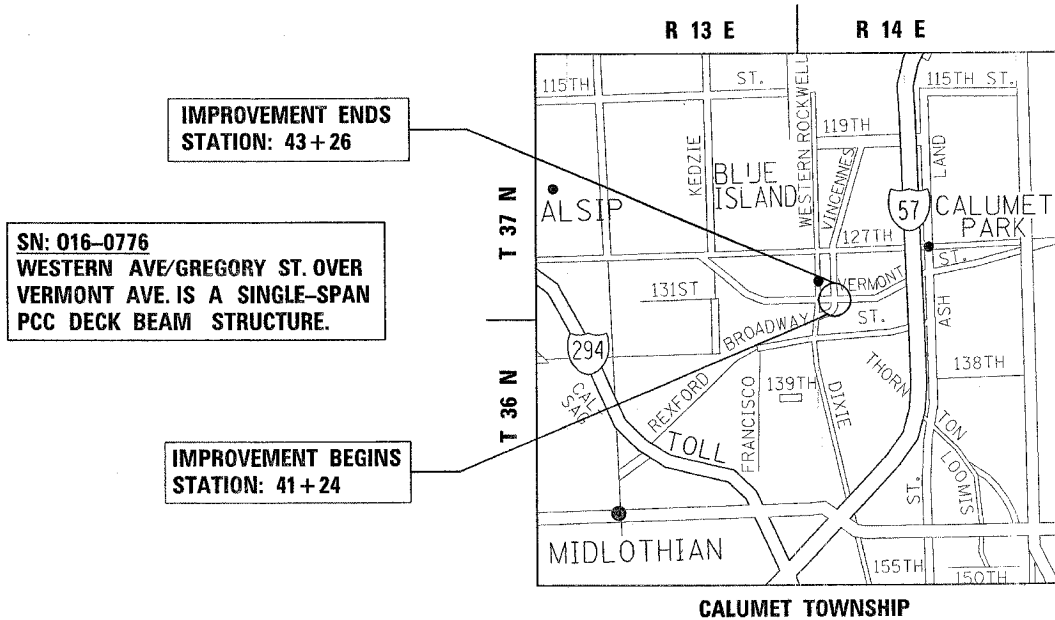
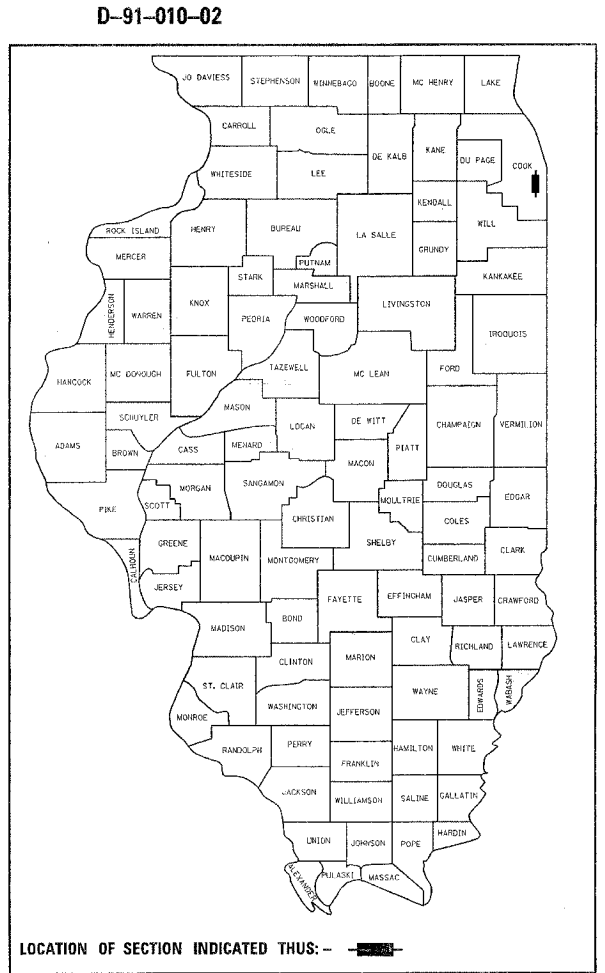
**PROPOSED
HIGHWAY PLANS**

**F.A.P. 370: WESTERN AVE./GREGORY ST.
OVER VERMONT AVE.
SECTION: 0103 1-2
BRIDGE BEAM REPLACEMENT & NEW DECK
COOK COUNTY
C-91-010-02**

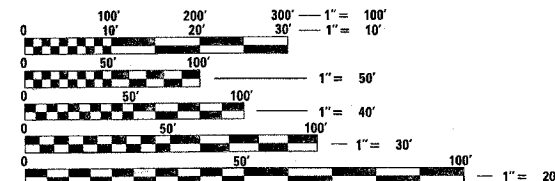
FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT LOCATED IN
THE CITY OF BLUE ISLAND

DISTRICT ONE - DESIGN / PLAN PREPARATION ENGINEER KEN ENG / LONG TRAN (847) 705-4240



TRAFFIC DATA
2006 ADT = 10,900
SPEED = 25 MPH



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123

GROSS AND NET LENGTH OF IMPROVEMENT = 202 FEET (0.04 MILE)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED August 27 20 07

Diane O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 12, 20 07

Eric E. Harrel
ENGINEER OF DESIGN AND ENVIRONMENT

October 12, 20 07

Milton R. Seo
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	01031-2	COOK	27	2
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

INDEX OF SHEETS:

SHEET NO.	DESCRIPTION:
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	EXISTING ROADWAY TYPICAL SECTION
5-6	SUGGESTED MAINTENANCE OF TRAFFIC PLANS
7-8	ROADWAY & PAVEMENT MARKING PLANS
9-18	BRIDGE PLANS (SN 016-0776)
19-22	BRIDGE APPROACH PAVEMENT DETAILS
23	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
24	BUTT JOINT AND HMA TAPER DETAILS
25	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
26	ARTERIAL ROAD INFORMATION SIGN
27	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS

STATE STANDARDS:

000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
420401-05	BRIDGE APPROACH PAVEMENT
421001-01	BAR REINFORCEMENT FOR CRC PAVEMENT
606001-03	CONCRETE CURB AND COMB. CONCRETE CURB & GUTTER
631006-04	TRAFFIC BARRIER TERMINAL, TYPE 1-B
631026-03	TRAFFIC BARRIER TERMINAL, TYPE 5
701601-04	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
702001-06	TRAFFIC CONTROL DEVICES
704001-03	TEMPORARY CONCRETE BARRIER

GENERAL NOTES:

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E" AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

THE CONTRATOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL CONTACT MS PATRICE HARRIS 708-597-9800 TWO (2) WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL FOR TYPICAL APPLICATION OF RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHOWN IN THE PLANS.

THE THICKNESS OF HOT-MIX ASPHALT MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT-MIX ASPHALT MIXTURE IS PLACED.

THE CONTRATOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, CITY OF BLUE ISLAND, CALUMET TOWNSHIP.

8/29/2007
c:\projects\101002\sh_rdw.y.dgn

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
WESTERN AVE./GREGORY STREET
OVER VERMONT AVE.
INDEX OF SHEETS, STATE STANDARDS,
GENERAL NOTES

DATE: 8/29/2007
DRAWN BY
CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	01031-2	COOK	27	3
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		X281-24 STATE 100%				
X0325804	BRIDGE APPROACH PAVEMENT REMOVAL	SQ YD	720	720				
20200100	EARTH EXCAVATION	CU YD	412	412				
20700220	POROUS GRANULAR EMBANKMENT	CU YD	271	271				
31101100	SUB-BASE GRANULAR MATERIAL, TYPE B	CU YD	210	210				
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	396	396				
42001500	P. C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT	SQ YD	149	149				
42100360	CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 13"	SQ YD	240	240				
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1200	1200				
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	240	240				
44000600	SIDEWALK REMOVAL	SQ FT	1200	1200				
50300255	CONCRETE SUPERSTRUCTURE	CU YD	107	107				
50300260	BRIDGE DECK GROOVING	SQ YD	499	499				
50300300	PROTECTIVE COAT	SQ YD	1588	1588				
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	16080	16080				
50800515	BAR SPLICERS	EACH	506	506				
50901755	PARAPET RAILING, SPECIAL	FOOT	162	162				
51500100	NAME PLATES	EACH	1	1				
59000200	EPOXY CRACK INJECTION	FOOT	20	20				
* 63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	2	2				
63200305	STEEL PLATE BEAM GUARD RAIL REMOVAL	FOOT	25	25				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5	5				
67100100	MOBILIZATION	L SUM	1	1				
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1				
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	2891	2891				
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	963	963				
70400100	TEMPORARY CONCRETE BARRIER	FOOT	222	222				
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	222	222				
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	101	101				

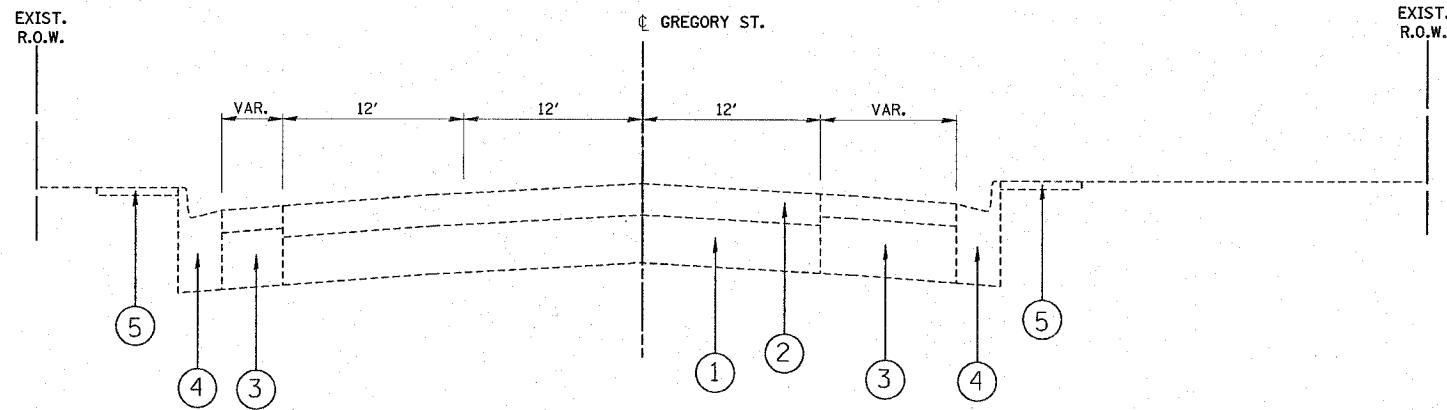
SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		X281-24 STATE 100%				
* 78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	52	52				
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	10	10				
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	10	10				
X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	499	499				
50101500	REMOVAL OF EXISTING SUPERSTRUCTURE	EACH	1	1				
XX003515	PRECAST PRESTRESSED CONCRETE DECK BEAMS (42" DEPTH)	SQ FT	5290	5290				
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	44	44				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1				
Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	11	11				

* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
WESTERN AVE./GREGORY ST.
OVER VERMONT AVE.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103 I-2	COOK	27	4
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	



EXISTING ROADWAY TYPICAL SECTION

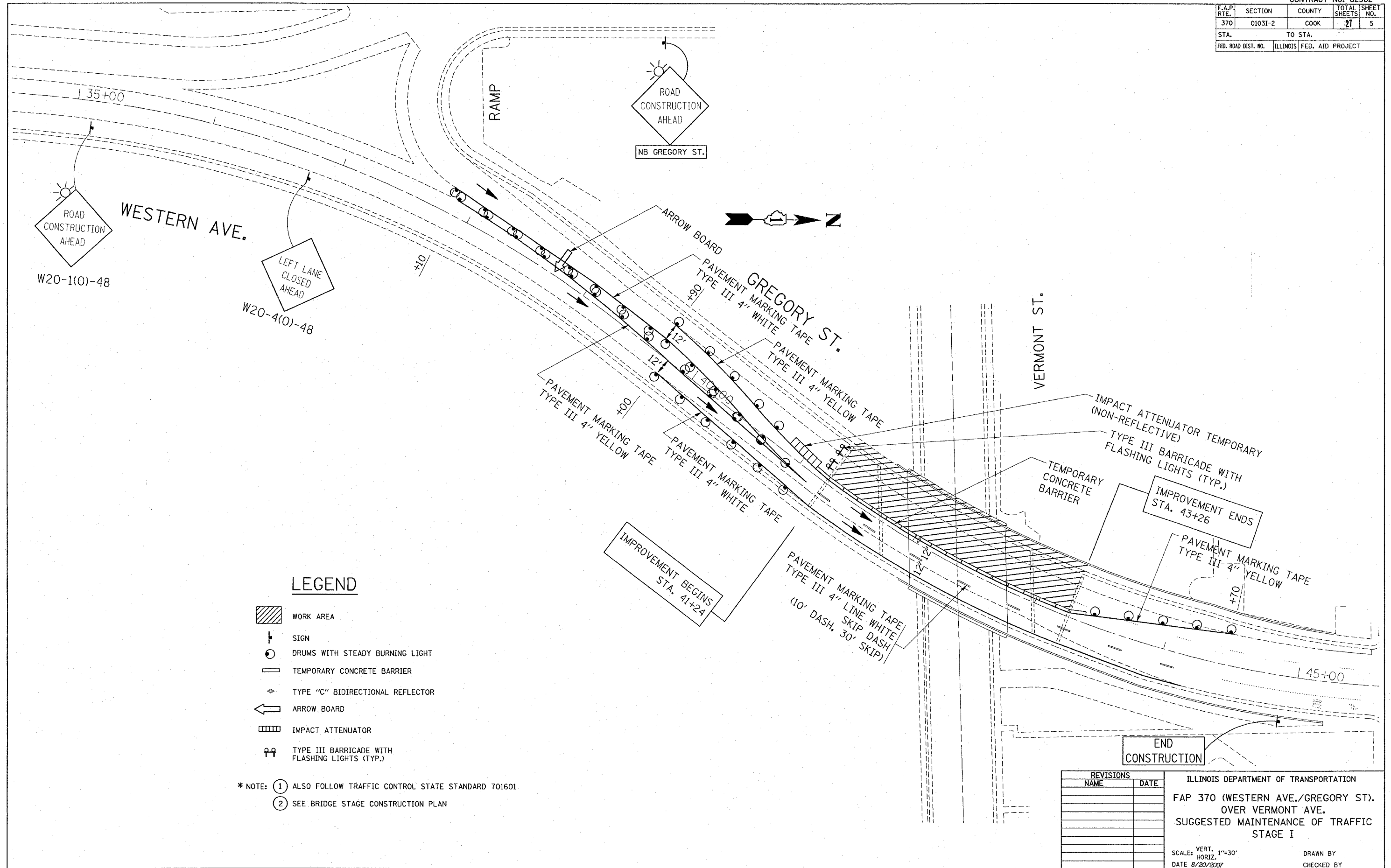
LEGEND:

- ① EXISTING P.C.C. PAVEMENT, 10" (±)
- ② EXISTING HMA OVERLAY, 3" (±)
- ③ EXISTING HMA SHOULDERS
- ④ EXISTING COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- ⑤ EXISTING P.C.C. SIDEWALK

8/6/2007
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REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION FAP 370: WESTERN AVE./GREGORY ST. EXISTING ROADWAY TYPICAL SECTION
NAME	DATE	
		SCALE: N.T.S. DRAWN BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	01031-2	COOK	27	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



LEGEND

- WORK AREA
- SIGN
- DRUMS WITH STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER
- TYPE "C" BIDIRECTIONAL REFLECTOR
- ARROW BOARD
- IMPACT ATTENUATOR
- TYPE III BARRICADE WITH FLASHING LIGHTS (TYP.)

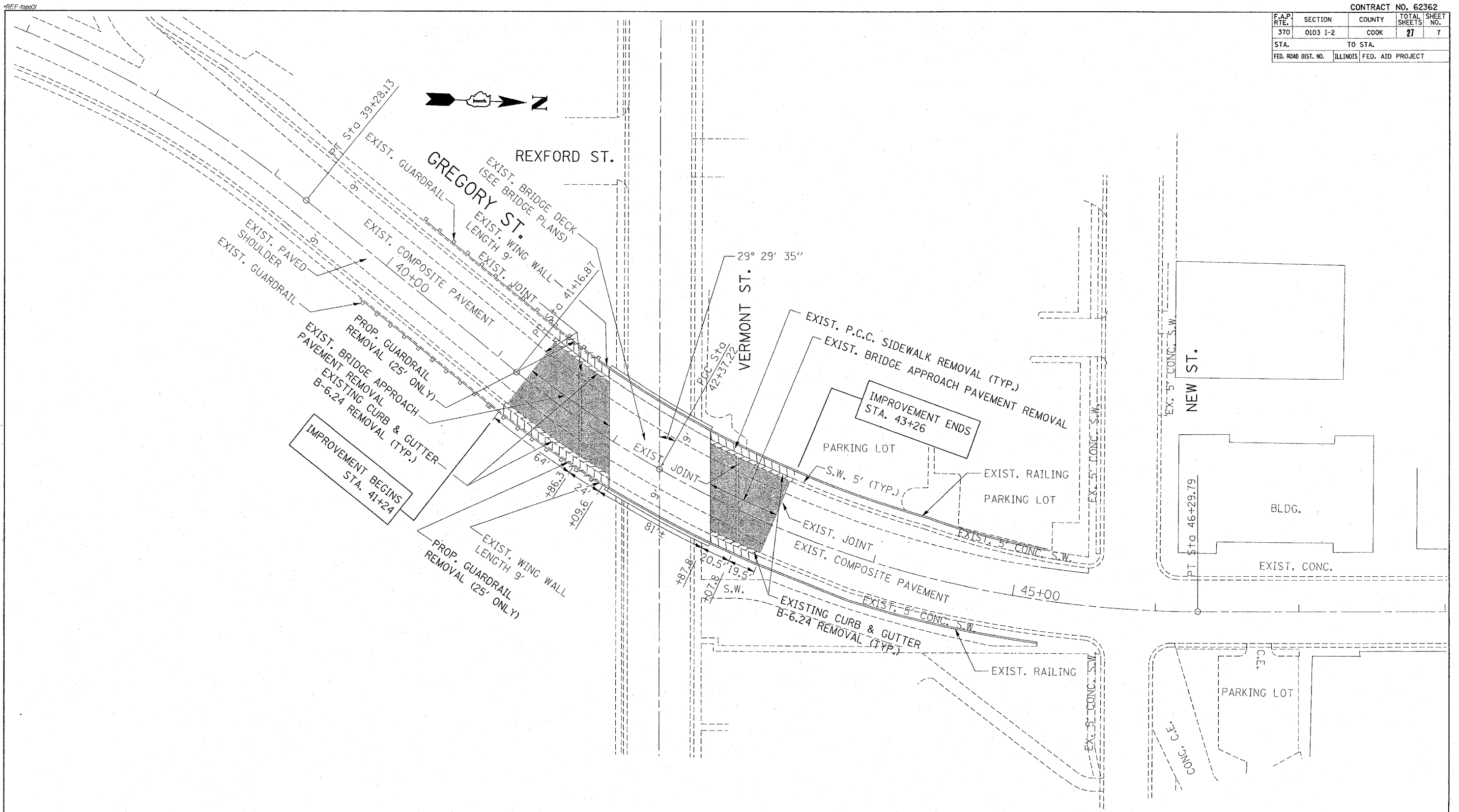
* NOTE: ① ALSO FOLLOW TRAFFIC CONTROL STATE STANDARD 701601
 ② SEE BRIDGE STAGE CONSTRUCTION PLAN

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION FAP 370 (WESTERN AVE./GREGORY ST.) OVER VERMONT AVE. SUGGESTED MAINTENANCE OF TRAFFIC STAGE I
NAME	DATE	
		SCALE: VERT. 1"=30' HORIZ. DATE 8/20/2007

DRAWN BY
CHECKED BY

PLOT DATE = 8/20/2007
 FILE NAME = g:\projects\11010102\ah_sogal.dgn
 USER NAME = drakeog
 USER NAME = drakeog

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103 I-2	COOK	27	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

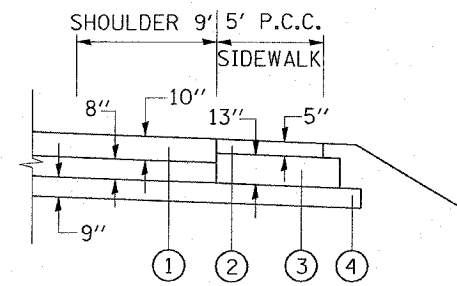
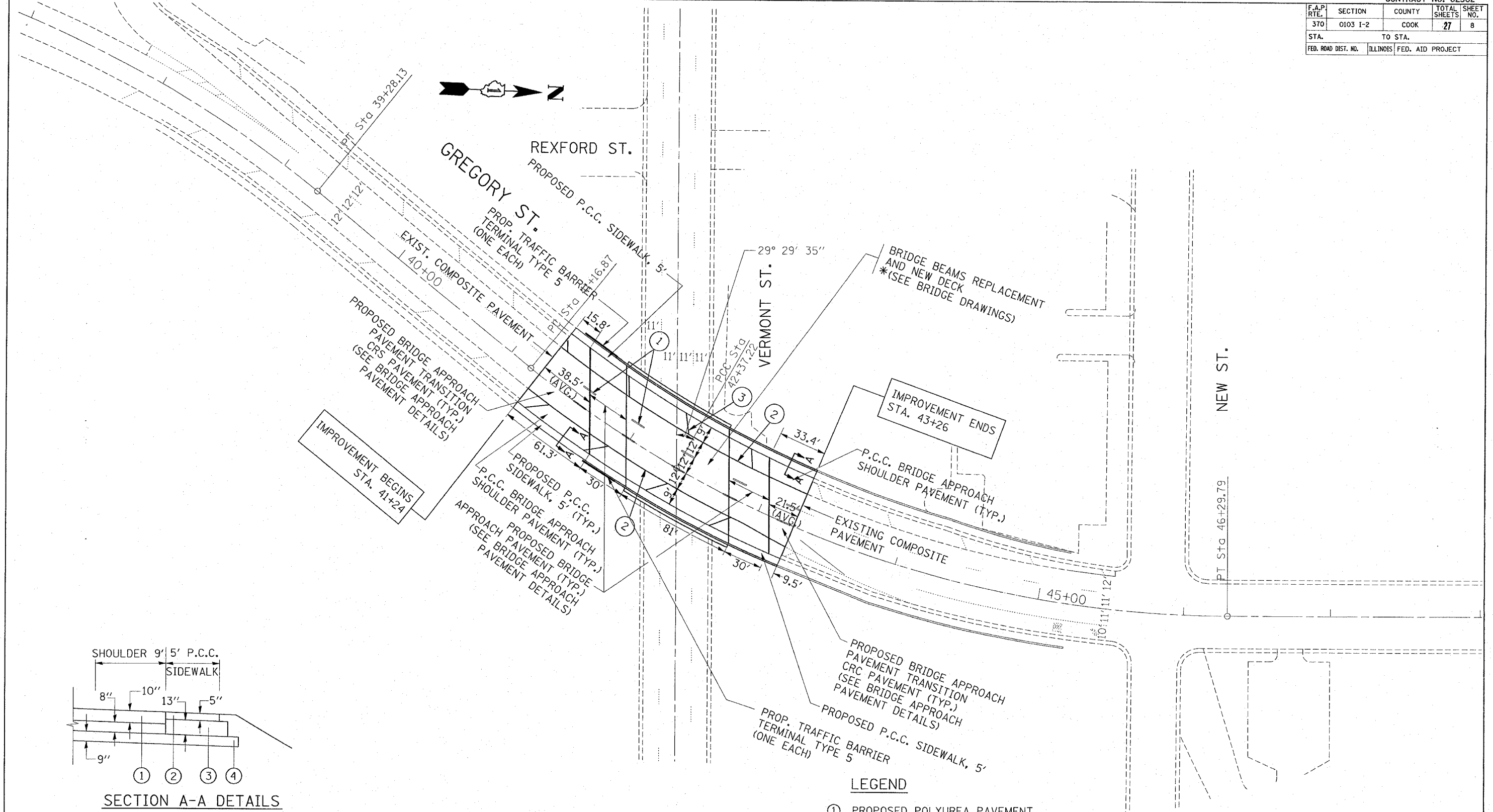


PLOT DATE = 8/29/2007
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 PLOT SCALE = 3/8" = 1' IN.
 USER NAME = drvakcsgn

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		WESTERN AVE/ GREGORY ST. OVER VERMONT AVE. EXISTING ROADWAY PLAN
SCALE: VERT. 1"=30' HORIZ. DATE 8/29/2007		DRAWN BY CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103 I-2	COOK	27	8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

*REF-001



SECTION A-A DETAILS

- ① PROPOSED SHOULDER (SEE APPROACH PAVEMENT DETAILS)
- ② PROPOSED P.C.C. SIDEWALK, 5"
- ③ PROPOSED SUB-BASE GRANULAR MATERIAL (CA₆), 8" AND VARIES TO 13"
- ④ PROPOSED POURUS GRANULAR EMBANKMENT, (PGE) 9"

- LEGEND**
- ① PROPOSED POLYUREA PAVEMENT MARKING TYPE 1 - LINE 4" LANE LINE (10' DASH, 30' SKIP)
 - ② PROPOSED POLYUREA PAVEMENT MARKING TYPE 1 SOLID WHITE 4" EDGE LINE
 - ③ PROPOSED POLYUREA PAVEMENT MARKING TYPE 1 - LINE 12" WHITE DIAGONAL

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**WESTERN AVE/ GREGORY ST.
 OVER VERMONT AVE.
 PROPOSED ROADWAY AND
 PAVEMENT MARKING PLAN**

SCALE: VERT. 1"=30'
 HORIZ. 1"=30'
 DATE 8/29/2007

DRAWN BY
 CHECKED BY

PLOT DATE = 8/29/2007
 PLOT SCALE = 30.0000 IN.
 USER NAME = dhrakosgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	SHEET	SHEET NO.
FAP 370	01031-2	COOK	9	10 SHEETS
FED. ROAD DIST. NO. 1	TRA. NO. 10	FED. AID PROJECT		

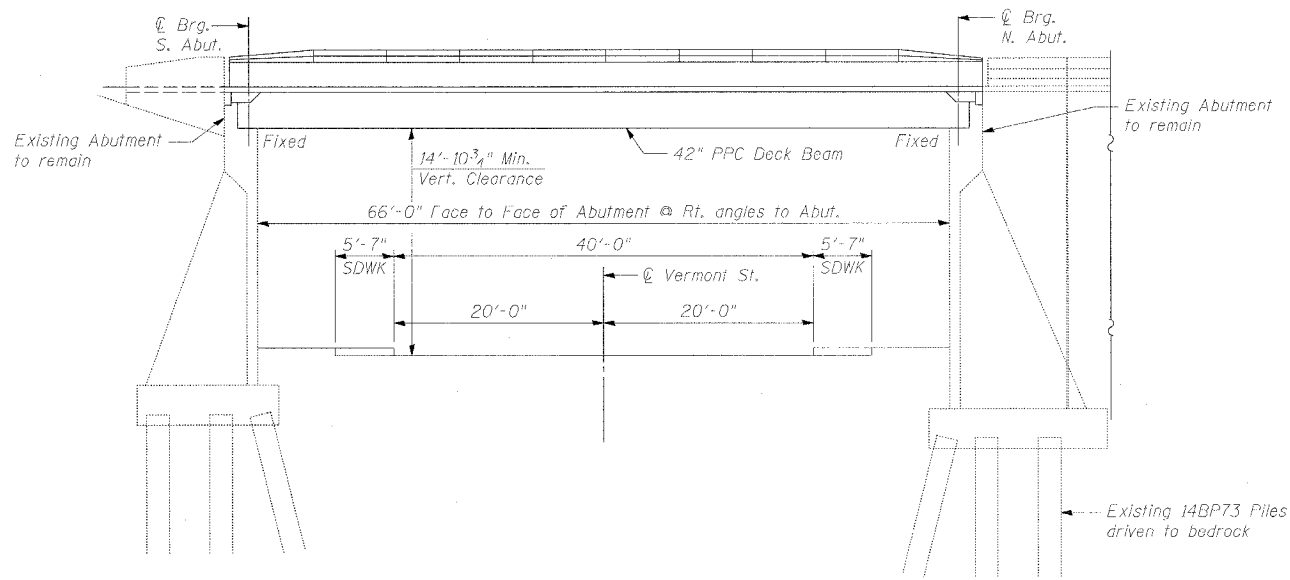
Contract # 62362

Benchmark:
Chiseled square at the southwest corner of a retaining wall at the southeast corner of the entrance to 'Great Lakes Bank of Choice' on the north side of Vermont Avenue.
Elevation: 635.79

Existing Structure No. 016-0776 was built in 1962. The existing superstructure consists of a bituminous wearing surface on 42"x36" (H x W) PPC Deck beams. The width is 70'-4 1/2" out to out.

The existing superstructure is to be removed and replaced using staged construction.

No Salvage.



ELEVATION

INDEX OF SHEETS

1. General Plan & Elevation
2. General Notes & Total Bill of Materials
3. Stage Construction
4. Temporary Concrete Barrier
5. Superstructure Details 42" Deck Beams
6. Superstructure Details Sections & Joint Details
7. Concrete Wearing Surface
8. Parapet & Railing Details
9. Bar Splicer Assembly Details
10. Substructure Modifications

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications - 11th ed.

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS

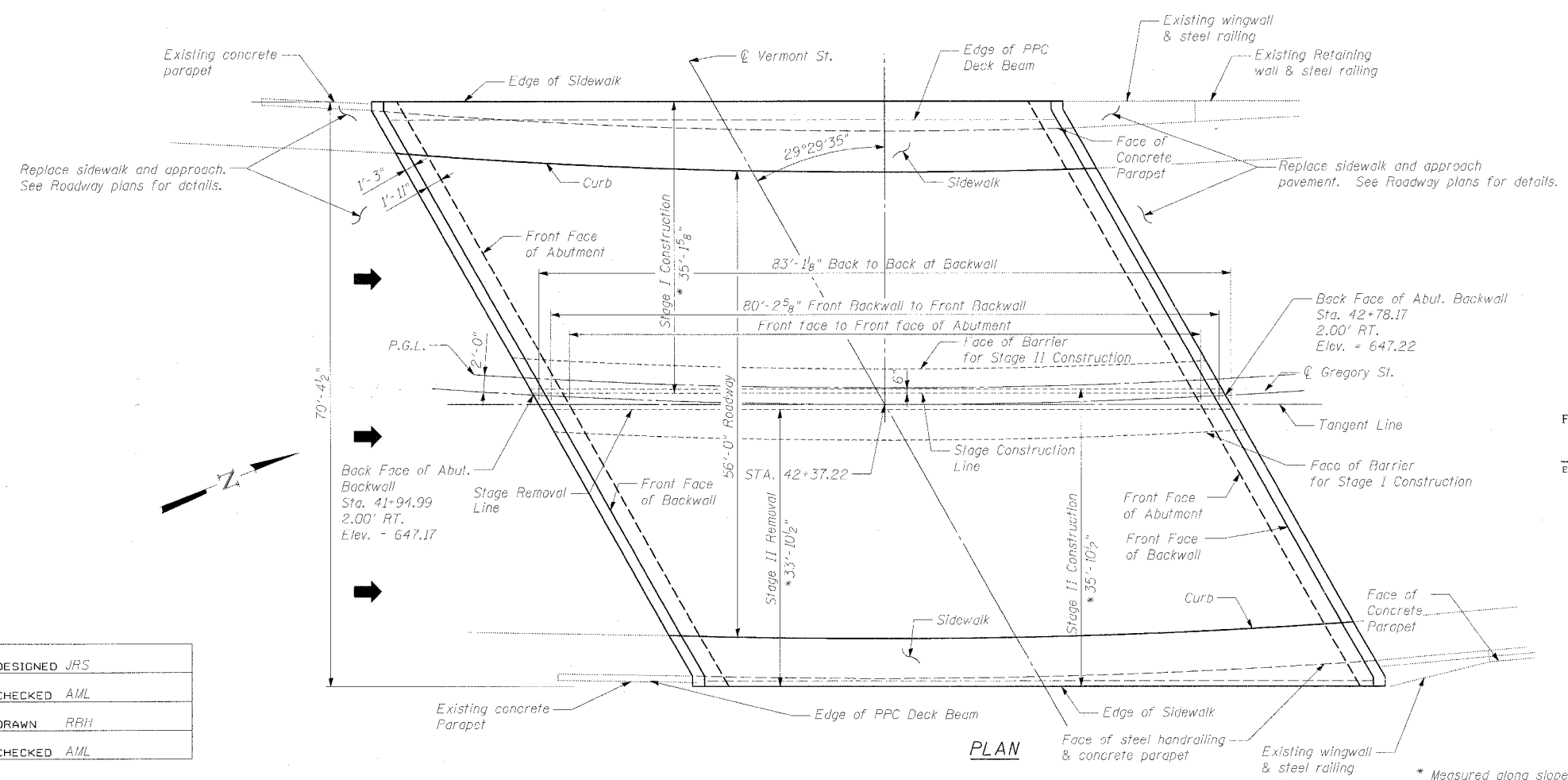
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 $f_y = 60,000$ psi (reinf.)

PRECAST PRESTRESSED UNITS

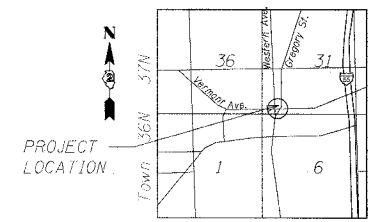
$f'_c = 5,000$ psi
 $f'_ci = 4,000$ psi
 $f'_s = 270,000$ psi (1/2" low lax strands)
 $f'_si = 201,960$ psi (1/2" low lax strands)

PILE DATA (2-ABUTS.)

Existing 14BP73 piles for abutments



PLAN



LOCATION SKETCH

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (SE)
ENGINEER OF BRIDGES AND STRUCTURES



11-30-08
Sept 14, 2007

DESIGNED	JRS
CHECKED	AML
DRAWN	RRH
CHECKED	AML

GENERAL PLAN & ELEVATION
GREGORY STREET
OVER VERMONT STREET
SECTION 01031-2
COOK COUNTY
STRUCTURE NO. 016-0776
STATION 42+37.22

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0112

* Measured along slope of deck. See sheet 3 of 10.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	DATE
FAP 370	01031-2	COOK	10	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract # 62362

GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of work, however, the Contractor will be paid for the quantity actually furnished based upon the unit bid price bid for the work.
4. Repair of the abutment shall be completed prior to placement of the new deck beams.
5. The Contractor is advised that the existing PPC Deck Beams are in deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.
6. Asbestos is present in the existing bearing pads and at the interface of the abutment backwall and concrete slab. Payment for removal of asbestos pad at the abutment/slab interface shall be incidental to the bid item "Asbestos Bearing Pad Removal".

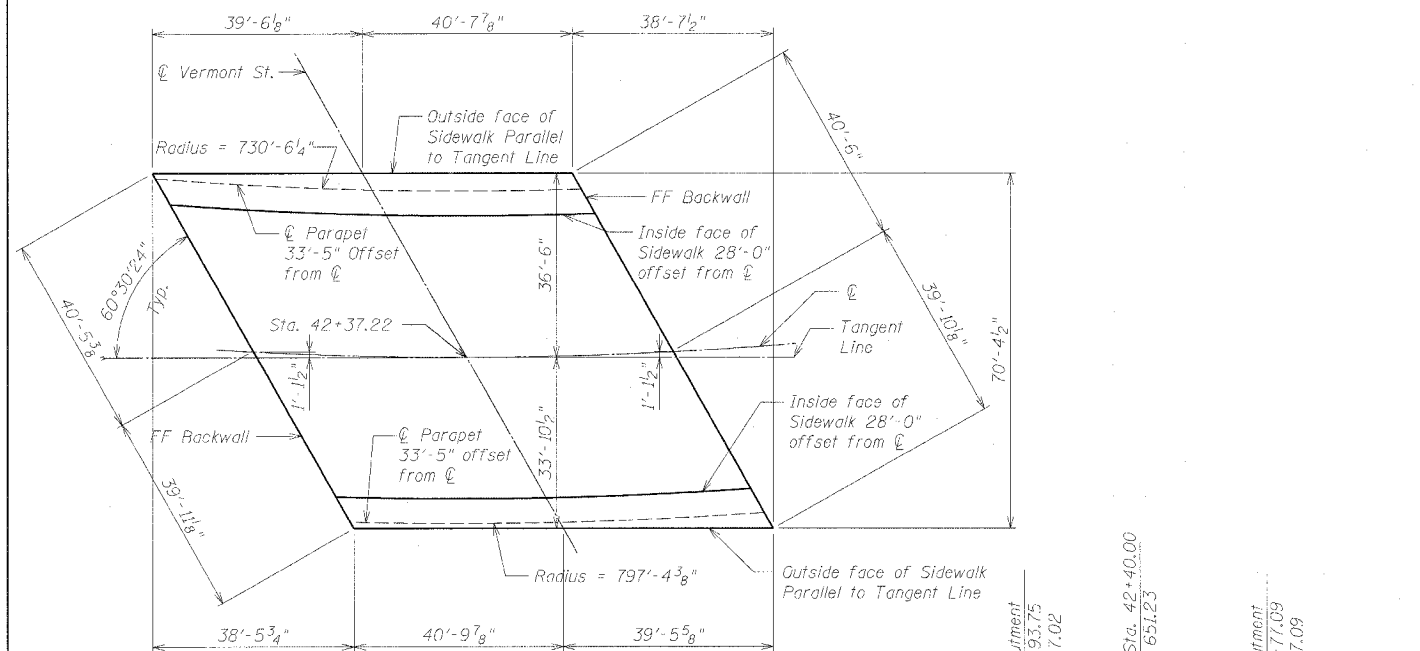
STATION 42+37.22
REBUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 370 SEC. 01031-2
LOADING HS-20
STR. NO. 016-0776

LETTERING FOR NAME PLATE

Locate Name Plate at Southeast corner of Bridge.
(See IDOT STD. 515001)
Salvage the existing name plate and incorporate into new construction next to the new name plate.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Abutments	Total
Protective Coat	Sq. Yd.	669	0	669
Concrete Superstructure	Cu. Yd.	107	0	107
Bridge Deck Grooving	Sq. Yd.	499	0	499
Reinforcement Bars, Epoxy Coated	Pound	16,080	0	16,080
Bar Splicers	Each	506	0	506
Parapet Railing (Special)	Foot	162	0	162
Name Plates	Each	1	0	1
Epoxy Crack Injection	Foot	0	20	20
Structural Repair of Concrete (Depth = <5")	Sq. Ft.	0	10	10
Concrete Wearing Surface, 5"	Sq. Yd.	499	0	499
Removal of Existing Superstructure	L. Sum	-	-	1
Precast Prestressed Concrete Deck Beams (42" Depth)	Sq. Ft.	5290	0	5290
Asbestos Bearing Pad Removal	Each	0	44	44



LAYOUT SKETCH

PROFILE GRADE LINE - GREGORY STREET

(2 3/4" added to the original 1961 Profile Grade Line)

CURVE DATA FOR G GREGORY STREET

P.I. Sta. 43+68.08
Δ = 41°44'07"
D = 7°-30'
R = 763.94
T = 291.23
L = 556.47'
SE = Varies 0.07 % and 0.062 %

DESIGNED	JRS
CHECKED	AML
DRAWN	RBH
CHECKED	AML

GENERAL NOTES & TOTAL BILL OF MATERIALS

GREGORY STREET
OVER VERMONT STREET
SECTION 01031-2
COOK COUNTY
STRUCTURE NO. 016-0776
STATION 42+37.22

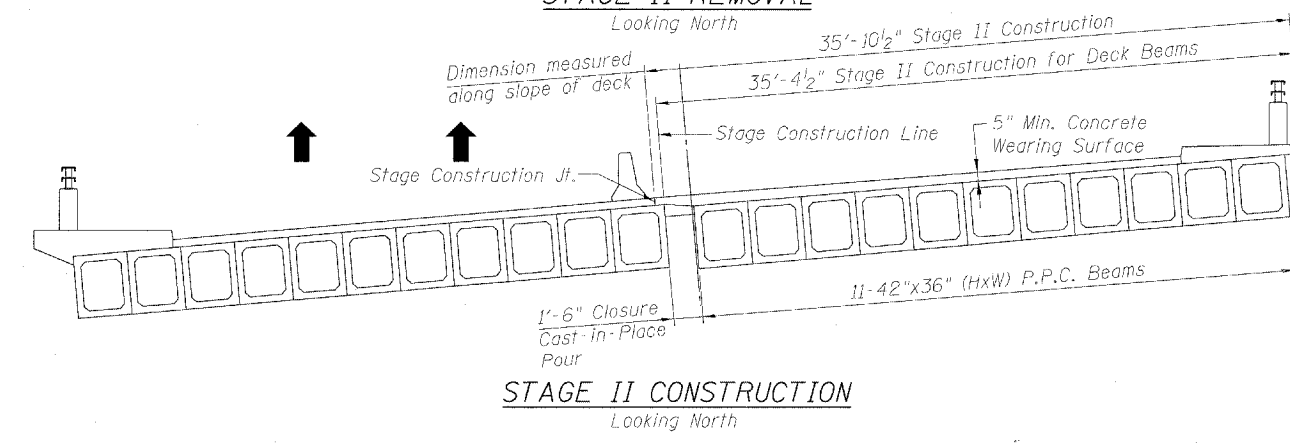
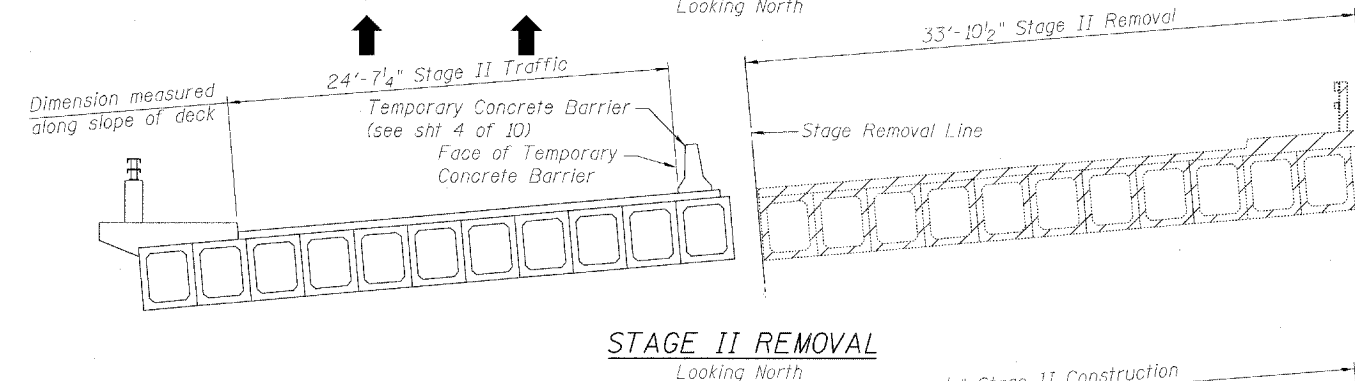
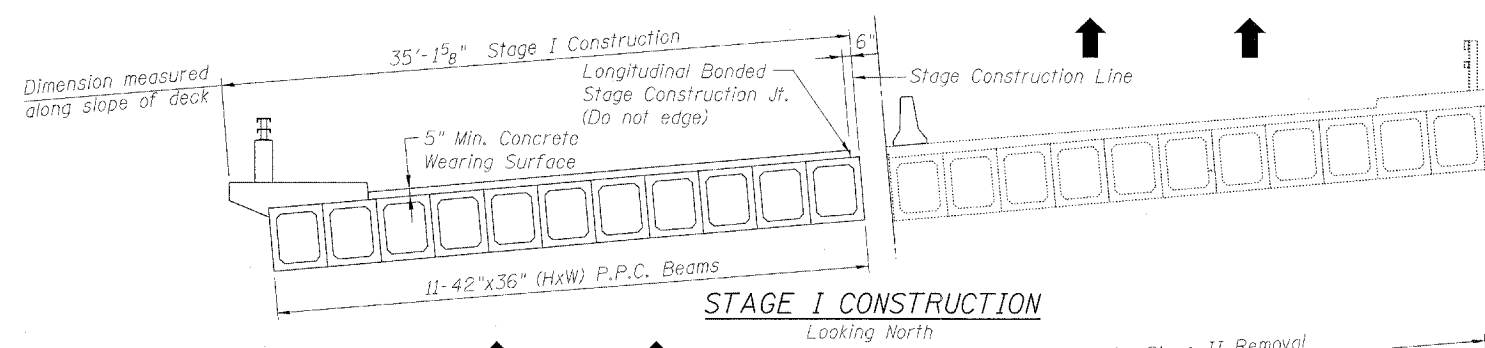
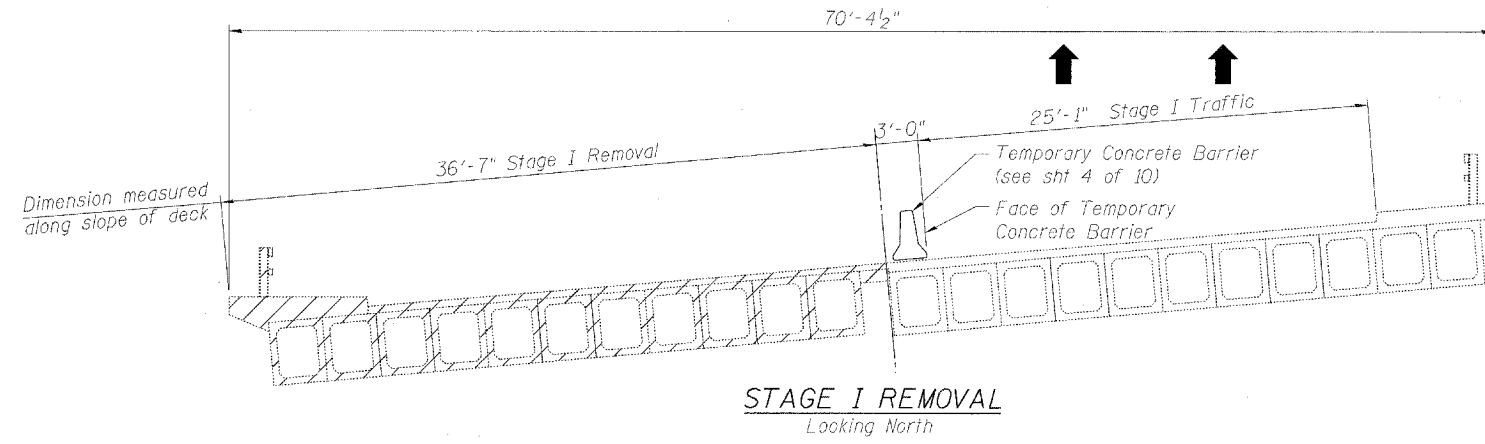


GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0112

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3
FAP 370	01031-2	COOK	27	11	10 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract # 62362



DESIGNED	JRS
CHECKED	AML
DRAWN	RBH
CHECKED	AML

STAGE CONSTRUCTION
GREGORY STREET
OVER VERMONT STREET
SECTION 01031-2
COOK COUNTY
STRUCTURE NO. 016-0776
STATION 42+37.22

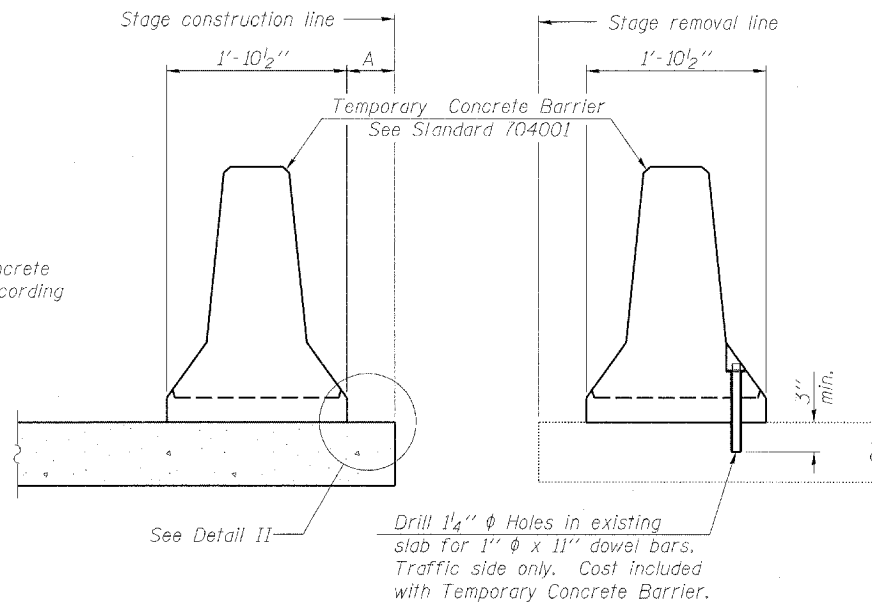
GRAEF ANHALT SCHLOEMER
and Associates Inc.

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8501 N. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0112

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 4
FAP 370	01031-2	COOK	27	12	10 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract # 62362



When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail II. No anchorage is required when "A" is greater than 3'-6".

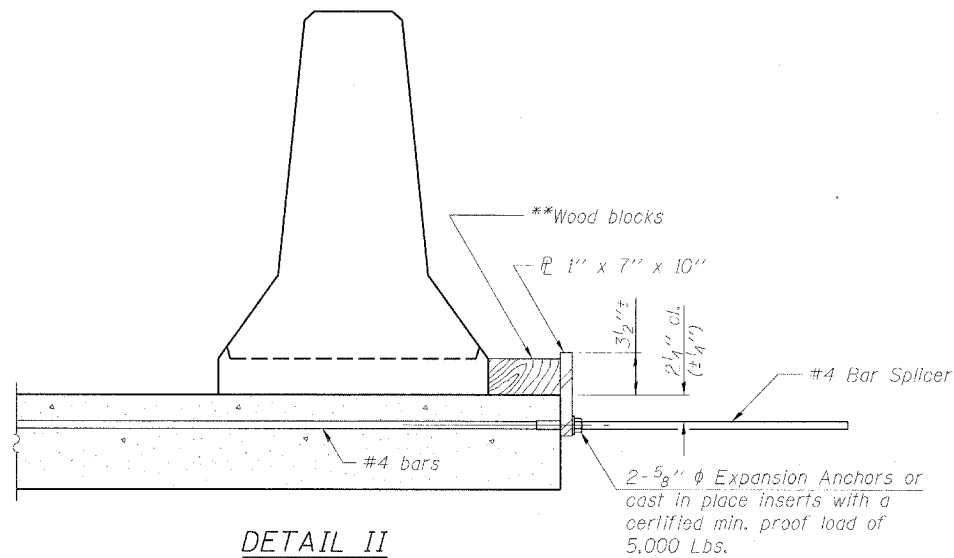
NOTES

Cost of anchorage is included with Temporary Concrete Barrier.
The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

NEW SLAB

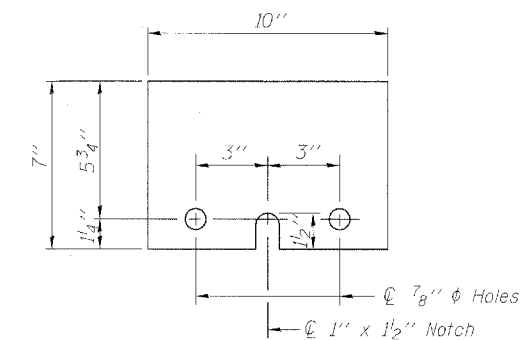
EXISTING SLAB

SECTIONS THRU SLAB



DETAIL II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.



STEEL RETAINER 1" x 7" x 10"

(Plate may be centered on bar splicer or located between bar splicers)

DESIGNED
CHECKED
DRAWN
CHECKED

R-27

11-1-06

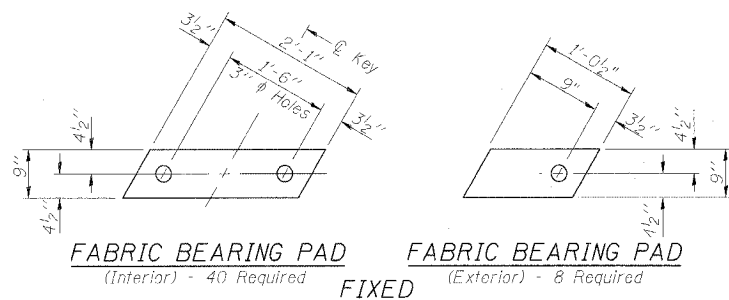
TEMPORARY CONCRETE BARRIER
GREGORY STREET
OVER VERMONT STREET
SECTION 01031-2
COOK COUNTY
STRUCTURE NO. 016-0776
STATION 42+37.22

GRAEF ANHALT SCHLOEMER
CONSULTING ENGINEERS AND LAND SURVEYORS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0112

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	SHEET NO.	SHEET	SHEET NO. 5
FAP 370	01031-2	COOK	13	10 SHEETS
REC. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

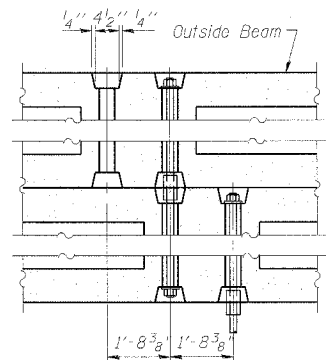
Contract # 62362



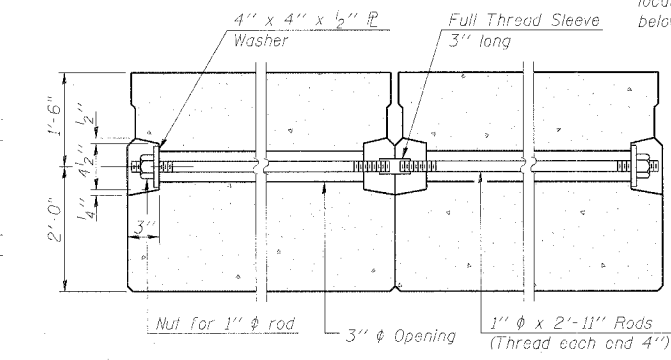
BILL OF MATERIAL

Bar	No. per beam	No. of beams	Total No.	Size	Length	Shape
A	128	22	2816	#3	2'-8"	
A ₁	73	22	1606	#4	6'-1"	
B	6	22	132	#5	28'-6"	
B ₁	8	22	176	#7	16'-6"	
B ₂	6	22	132	#4	28'-0"	
D	12	22	264	#4	4'-3"	
D ₁ (E)	81	4	324	#5	4'-10"	
U	63	22	1386	#3	8'-7"	
U ₁	10	22	220	#4	8'-7"	
Precast Prestressed Conc. Deck Bms. (42" Depth)			Sq. Ft.		5290	
Bar Splicers			Each		274	

Reinforcement Bars designated (E) shall be epoxy coated

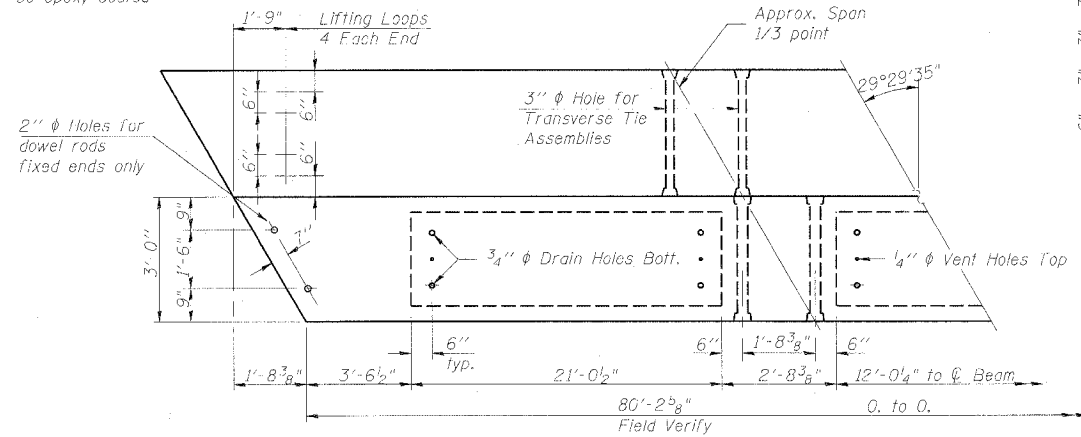


TYPICAL TRANSVERSE TIE ASSEMBLY

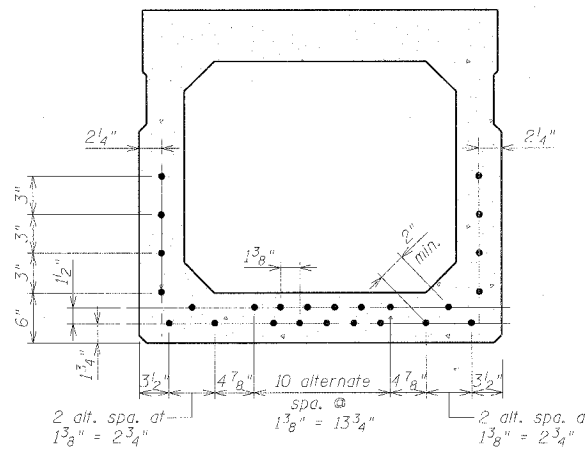


TYPICAL SECTION

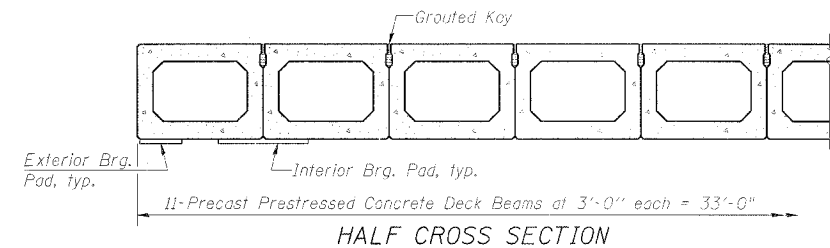
21-1/2" Ø Strands, Each Strand Stressed to 30,900 Lbs.
7-Strands 1 3/4" up, 6-Strands 3/4" up, 2-strands 6" up,
2-strands 9" up, 2-Strands 12" up, 2-Strands 15" up



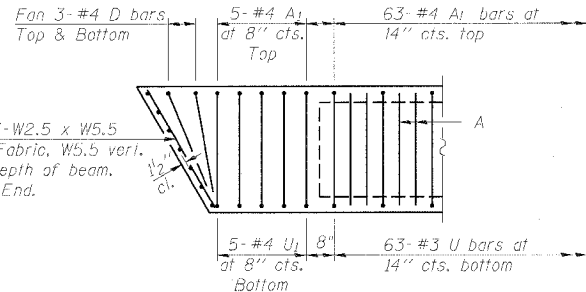
PLAN



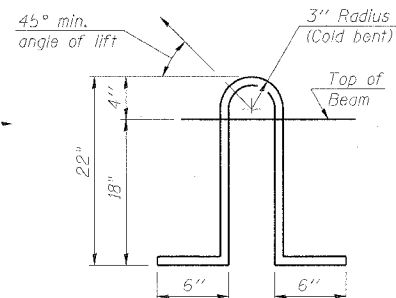
1/2" Ø 270 K.S.I. STRANDS
Place strands symmetrically about Ψ of beam



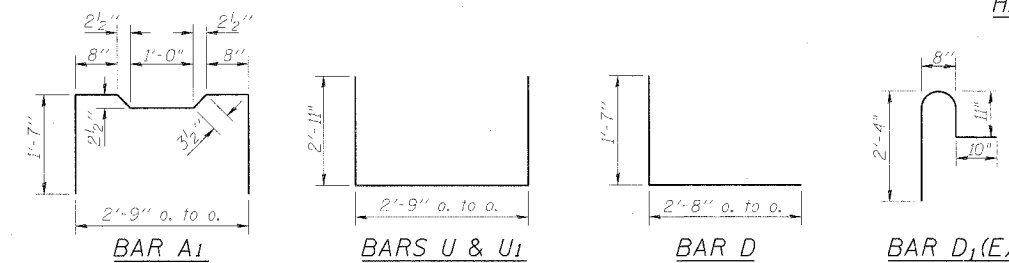
HALF CROSS SECTION



END PLAN



LIFTING LOOP DETAIL



NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 3-1/2" Ø 270 ksi strands, as shown. The 1" Ø rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. Non prestressing steel shall conform to ASTM A 706 (1L MOD), Grade 60. The bearing seal surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key. Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'ci, shall be 4,000 p.s.i. Precaster to provide threaded dowels for bar splicers in closure pour.

DESIGNED -
CHECKED -
DRAWN -
CHECKED -

PD-5-R

11-1-06

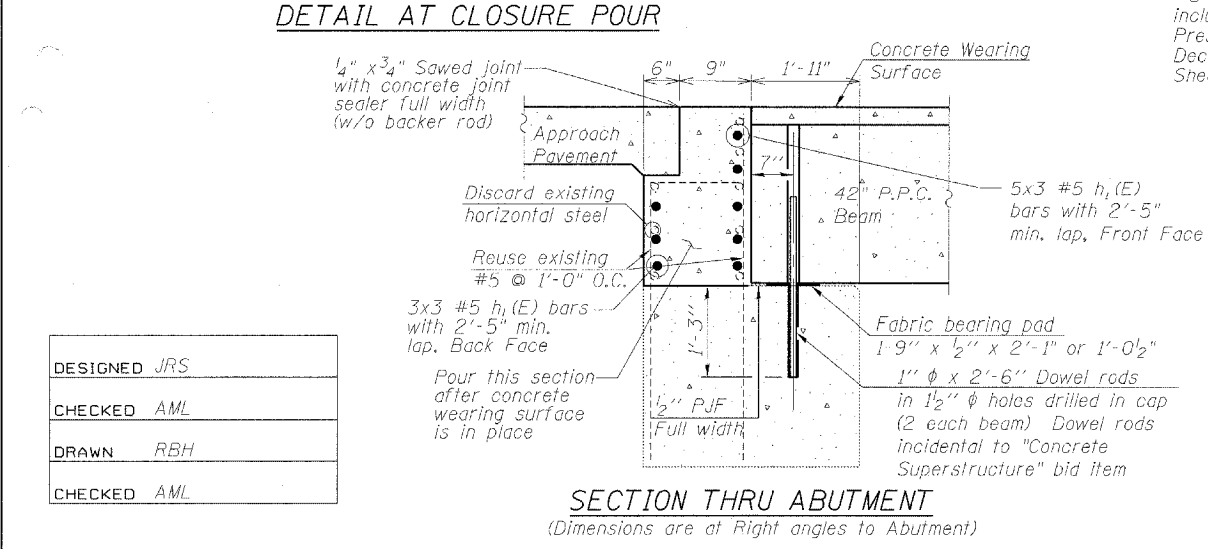
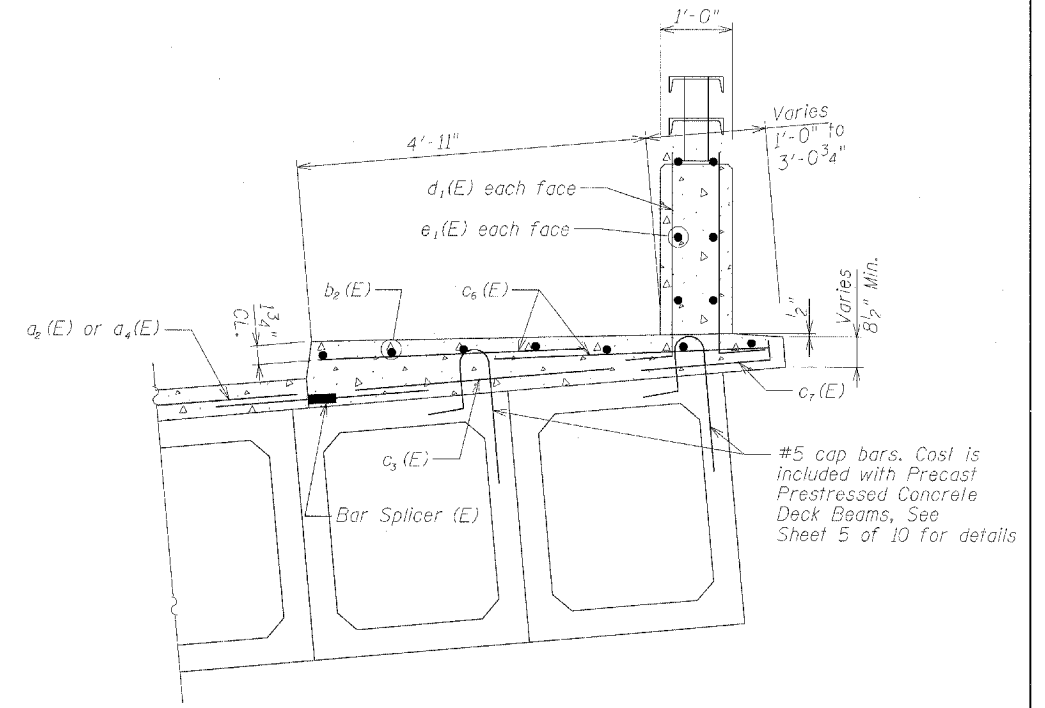
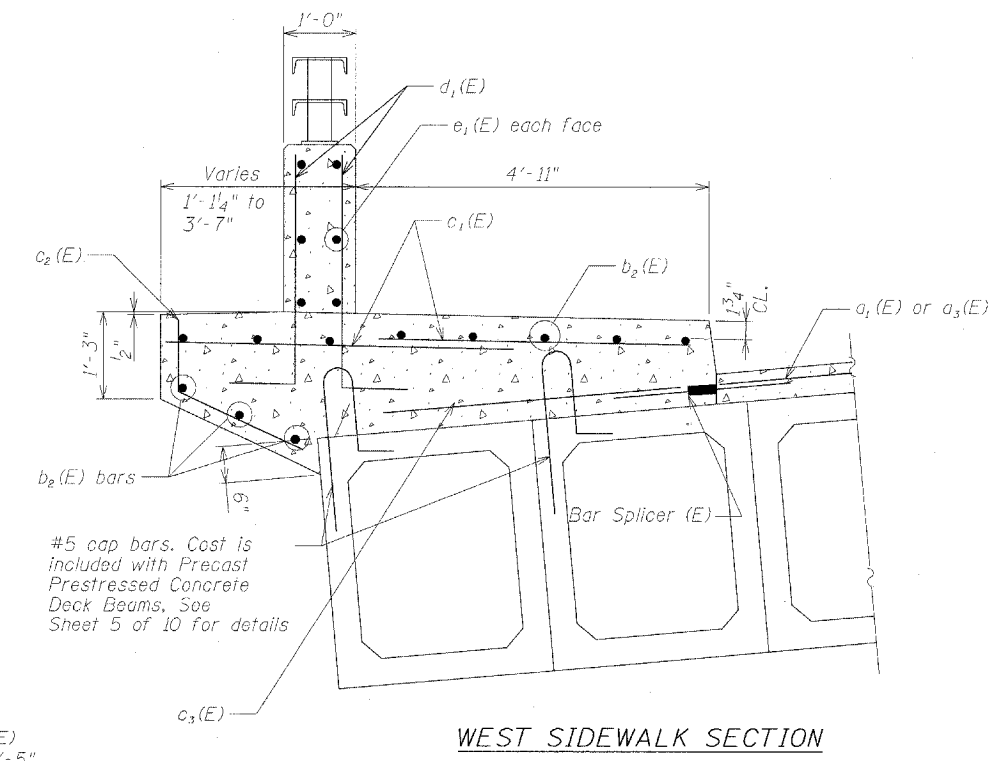
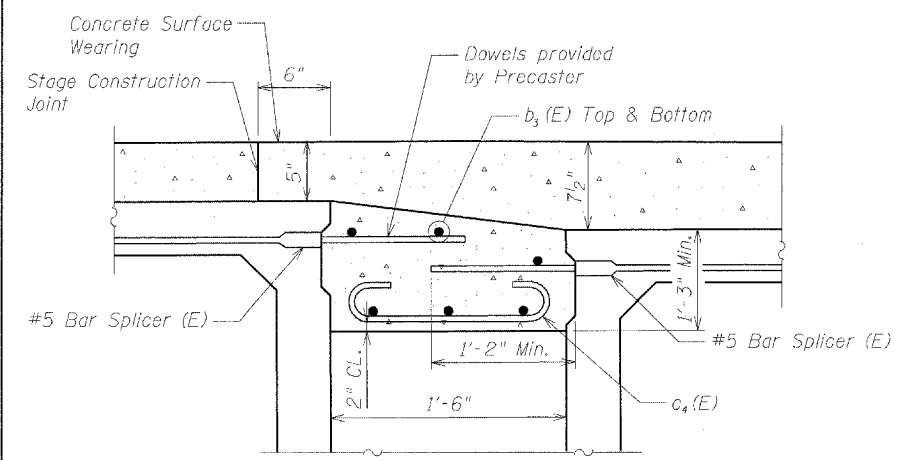
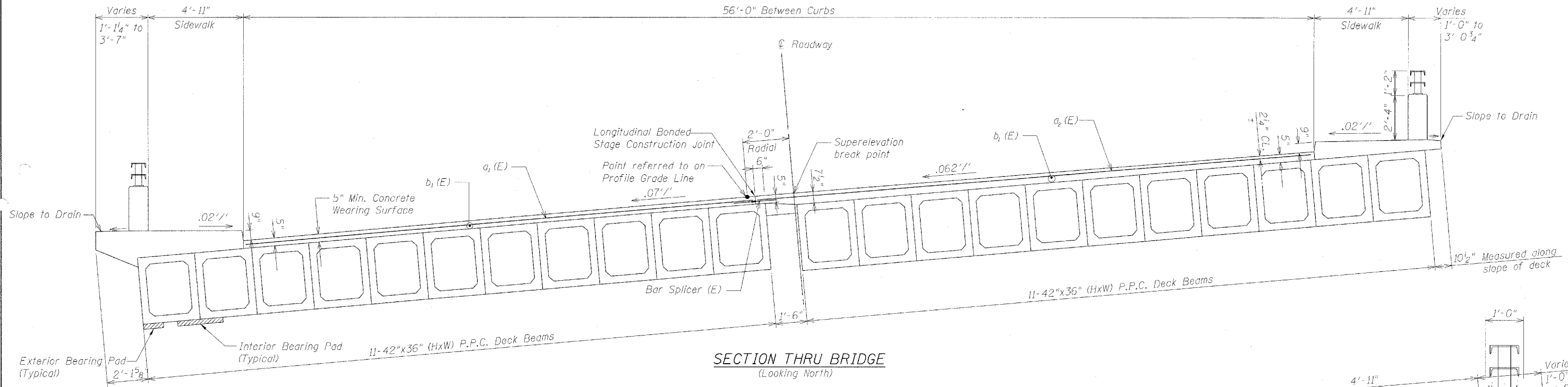
SUPERSTRUCTURE DETAILS
42" DECK BEAMS
GREGORY STREET
OVER VERMONT STREET
SECTION 01031-2
COOK COUNTY
STRUCTURE NO. 016-0776
STATION 42+37.22

GRAEF ANHALT SCHLOEMER
CONSULTING ENGINEERS AND LAND SURVEYORS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0112

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	PROJECT	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 6 10 SHEETS
FAP 370	01031-2	COOK	27	14	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract # 62362



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁ (E)	48	#5	28'-9"	
Concrete Superstructure			Cu. Yd.	29.2
Reinforcement Bars, Epoxy Coated			Pound	1440

Reinforcement Bars designated (E) shall be epoxy coated

Notes:

After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.

All horizontal dimensions are at right angles to beam ends.

Preformed joint filler is incidental to "Precast Prestressed Concrete Deck Beams (42" Depth)" bid item.

See sheet 5 of 10 for bearing pad details.

SUPERSTRUCTURE DETAILS
SECTIONS AND JOINT DETAILS
GREGORY STREET
OVER VERMONT STREET
SECTION 01031-2
COOK COUNTY
STRUCTURE NO. 016-0776
STATION 42+37.22

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0112

GRAEF ANHALT SCHLOEMER and Associates Inc.

DESIGNED	JRS
CHECKED	AML
DRAWN	RBH
CHECKED	AML

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
FAP 370	01031-2	COOK	27	15	10 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract # 62352

BILL OF MATERIAL

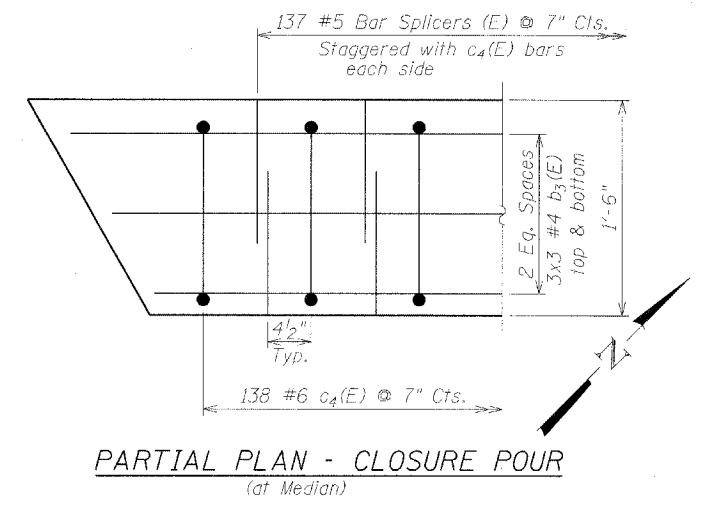
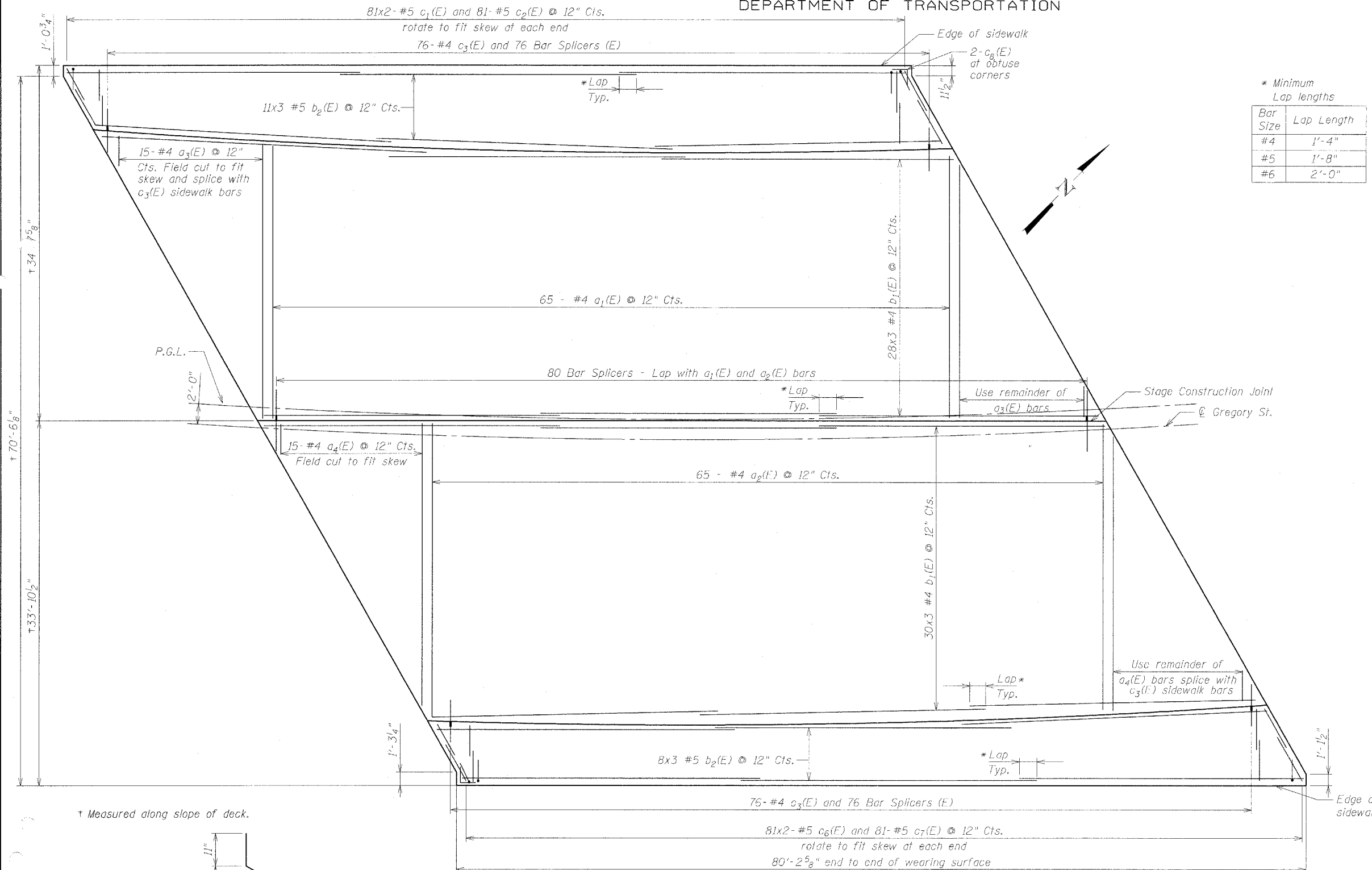
Bar	No.	Size	Length	Shape
a ₁ (E)	65	#4	25'-10"	—
a ₂ (E)	65	#4	28'-8"	—
a ₃ (E)	15	#4	26'-8"	—
a ₄ (E)	15	#4	27'-3"	—
b ₁ (E)	174	#4	27'-10"	—
b ₂ (E)	57	#5	30'-0"	—
b ₃ (E)	18	#4	27'-10"	—
c ₁ (E)	162	#5	5'-0"	—
c ₂ (E)	81	#5	2'-10"	└
c ₃ (E)	152	#4	4'-0"	—
c ₄ (E)	138	#6	2'-6"	┌
c ₅ (E)	162	#5	4'-6"	—
c ₇ (E)	81	#5	2'-5"	└
c ₈ (E)	4	#4	3'-0"	└

Concrete Superstructure	Cu. Yd.	63.4
Bridge Deck Grooving	Sq. Yd.	499
Reinforcement Bars, Epoxy Coated	Pound	12,590
Bar Splicers	Each	232
Concrete Wearing Surface 5"	Sq. Yd.	499
Protective Coat	Sq. Yd.	669

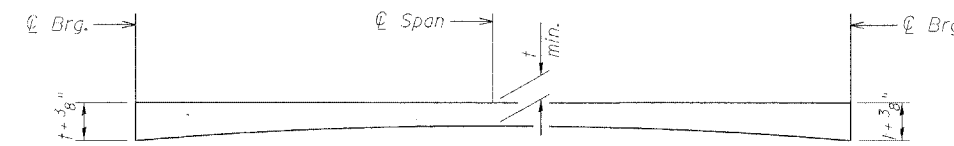
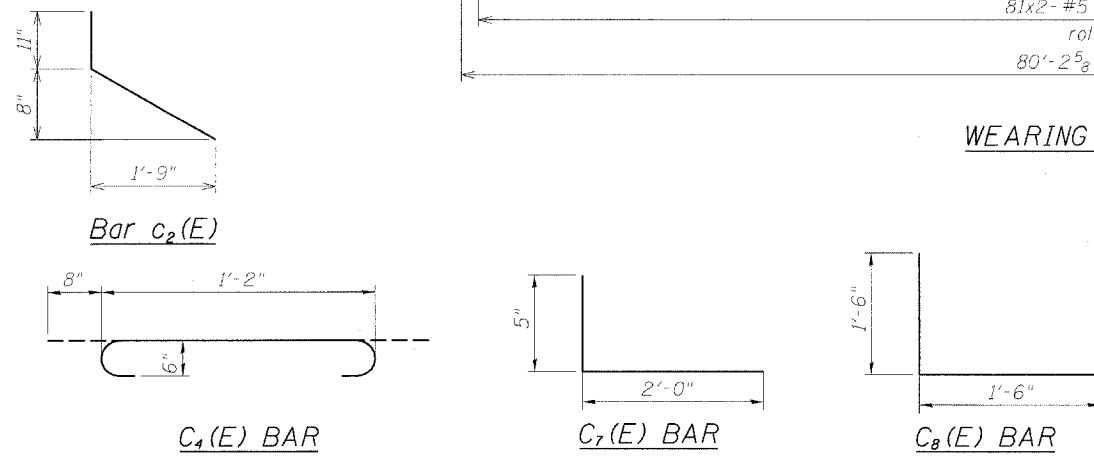
Reinforcement Bars designated (E) shall be epoxy coated

* Minimum Lap lengths

Bar Size	Lap Length
#4	1'-4"
#5	1'-8"
#6	2'-0"



WEARING SURFACE PLAN



REINFORCED CONCRETE WEARING SURFACE PROFILE

t = Minimum specified wearing surface thickness
See sheet 6 of 10 for details.

DESIGNED	JRS
CHECKED	AML
DRAWN	RBH
CHECKED	AML

PARTIAL PLAN - CLOSURE POUR
(at Median)

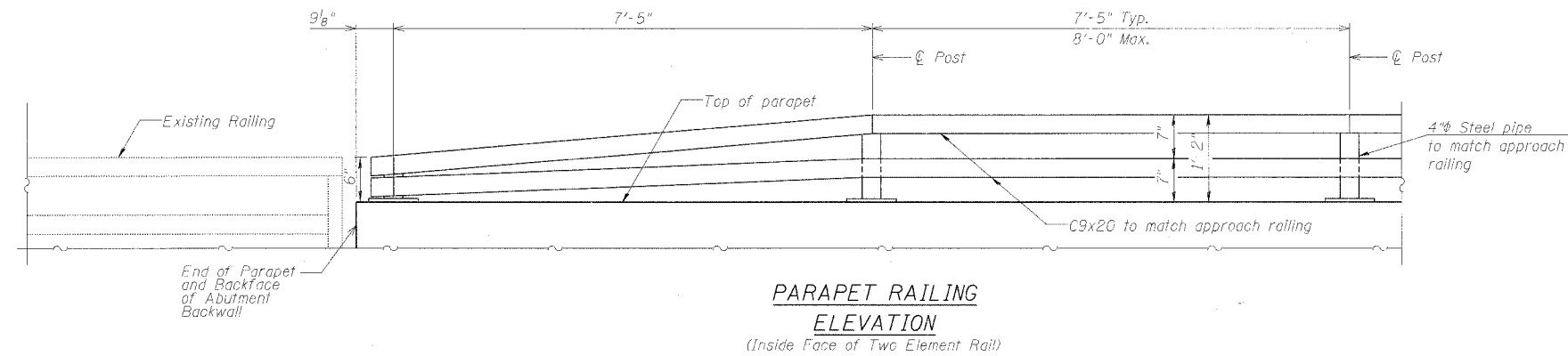
CONCRETE WEARING SURFACE
GREGORY STREET
OVER VERMONT STREET
SECTION 01031-2
COOK COUNTY
STRUCTURE NO. 016-0776
STATION 42+37.22

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0112

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	QUANTITY	DATE	SHEET	SHEET NO. 8 10 SHEETS
1 AP 370	01031-2	COOK		16	
Contract # 62362					

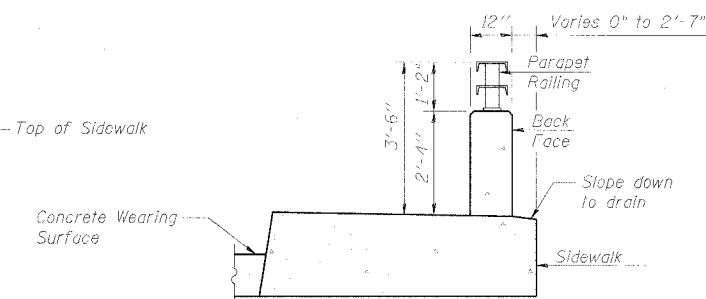
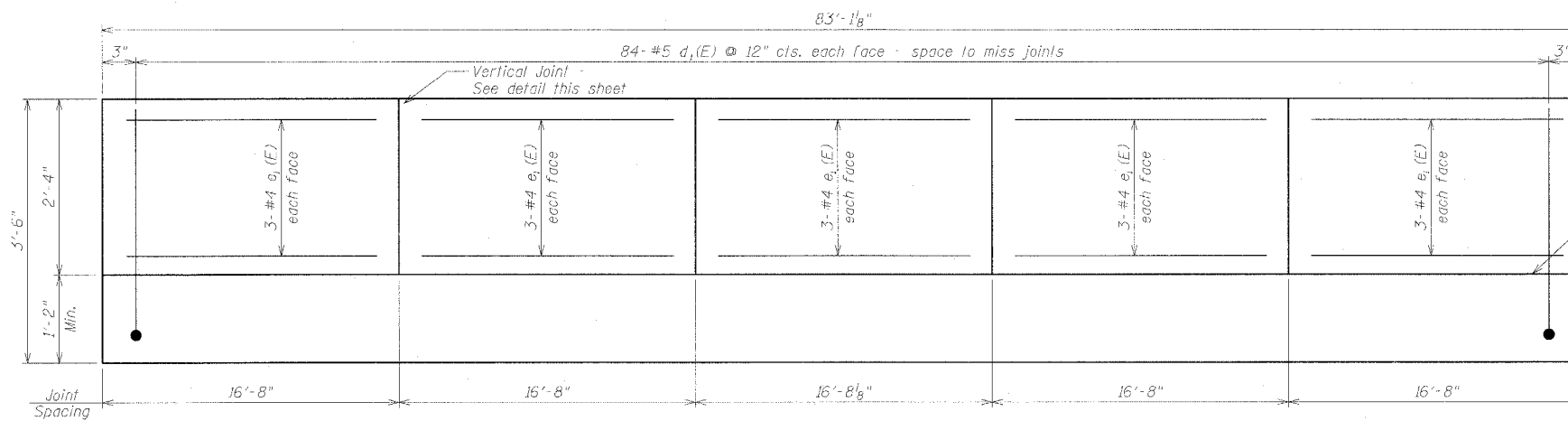
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



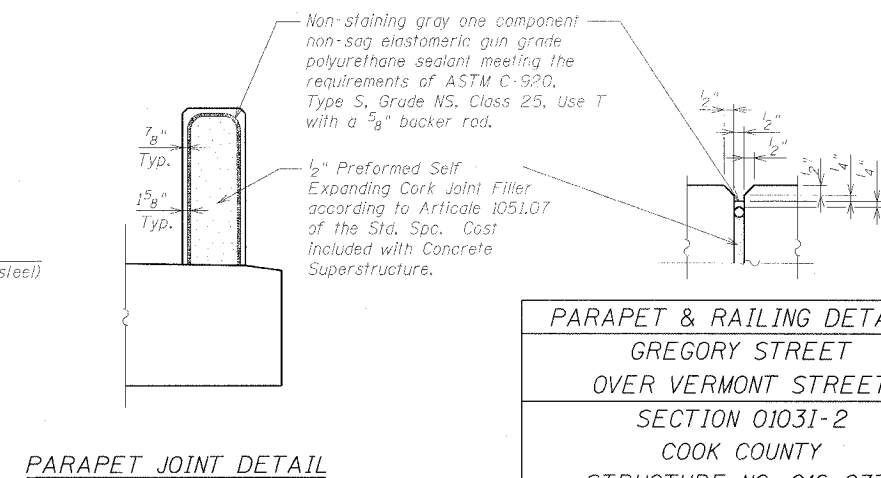
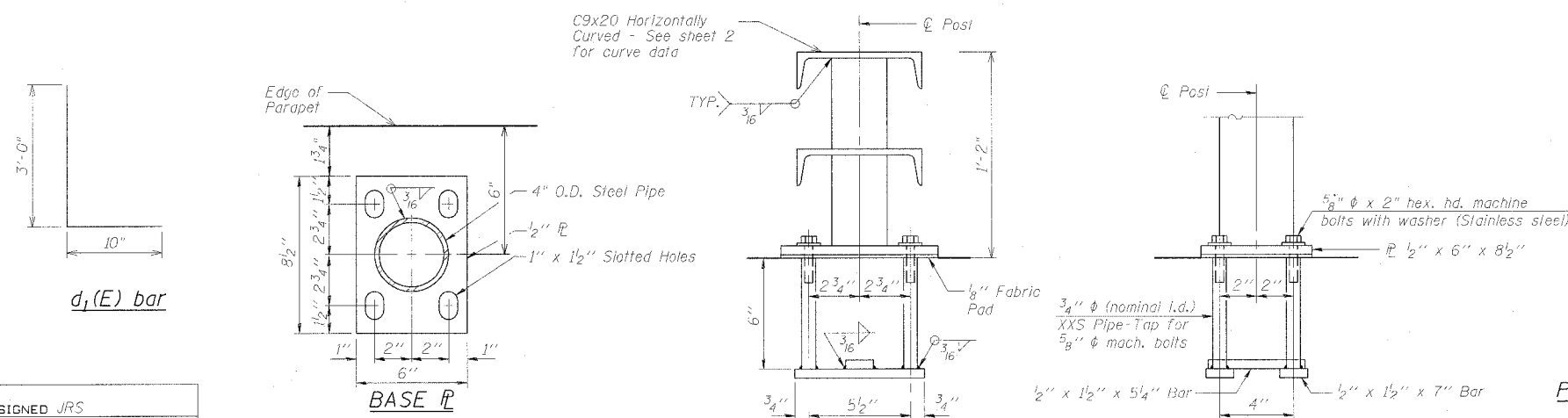
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d ₁ (E)	335	#5	3'-10"	L
e ₁ (E)	60	#4	15'-4"	—
Parapet Railing (Special)		Foot		162
Reinforcement Bars, Epoxy Coated		Pound		2050
Concrete Superstructure		Cu. Yd.		14.3

Reinforcement Bars designated (E) shall be epoxy coated



PARAPET ELEVATION
(Railing not shown)



ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" ϕ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

PARAPET & RAILING DETAILS
GREGORY STREET
OVER VERMONT STREET
SECTION 01031-2
COOK COUNTY
STRUCTURE NO. 016-0776
STATION 42+37.22

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0112

DESIGNED	JRS
CHECKED	AML
DRAWN	RBH
CHECKED	AML

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 370	01031-2	COOK	21	17
FED. ROAD DIST. NO. 7	ILLINOIS	STANDARD PROJECT		

SHEET NO. 9
10 SHEETS

Contract # 62362

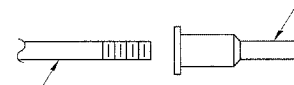
NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_l$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_l$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_l = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8

The diameter of this part is equal or larger than the diameter of bar spliced.



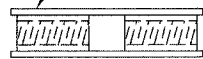
The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



** ONE PIECE

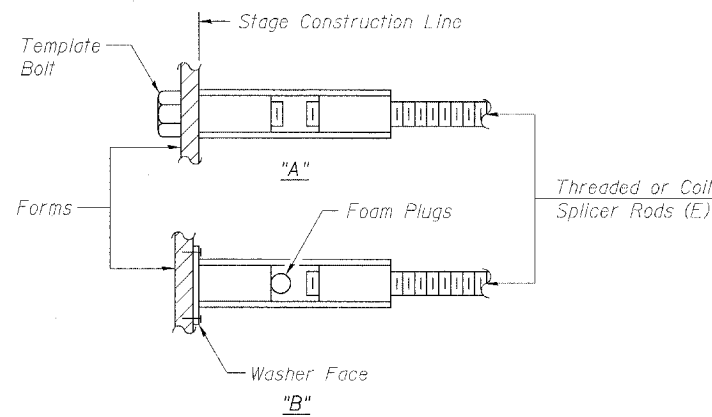
Wire Connector



WELDED SECTIONS

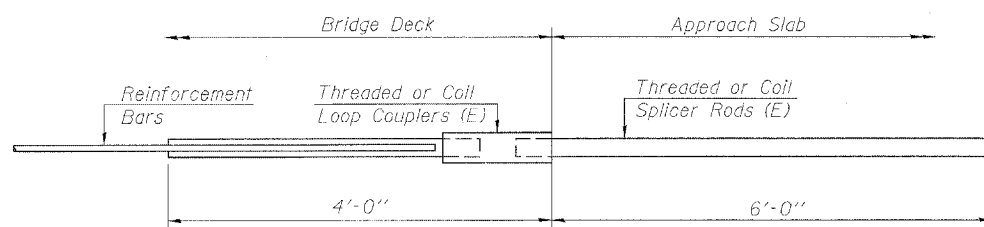
BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



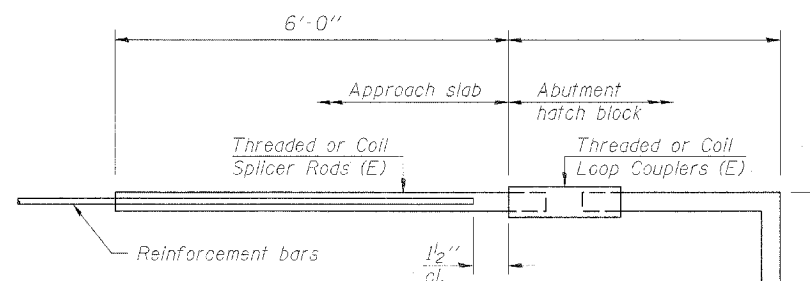
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



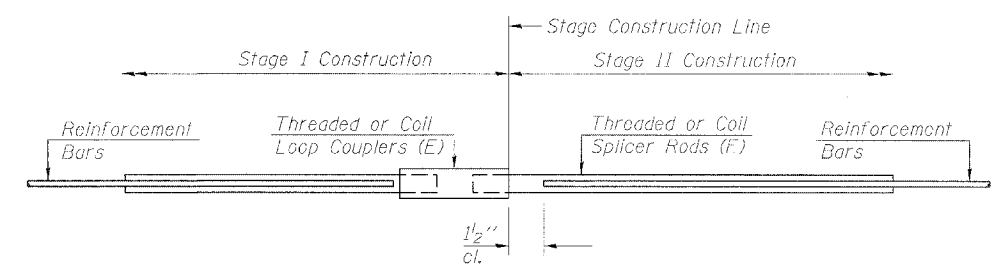
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 0



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 0



STANDARD

Bar Size	No. Assemblies Required	Location
#4	80	Stage Const. Joint
#4	152	Sidewalks
#5	274	PPC Deck Beams

BAR SPLICER ASSEMBLY DETAILS

GREGORY STREET
OVER VERMONT STREET
SECTION 01031-2
COOK COUNTY
STRUCTURE NO. 016-0776
STATION 42+37.22



GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0112

DESIGNED -
CHECKED -
DRAWN -
CHECKED -

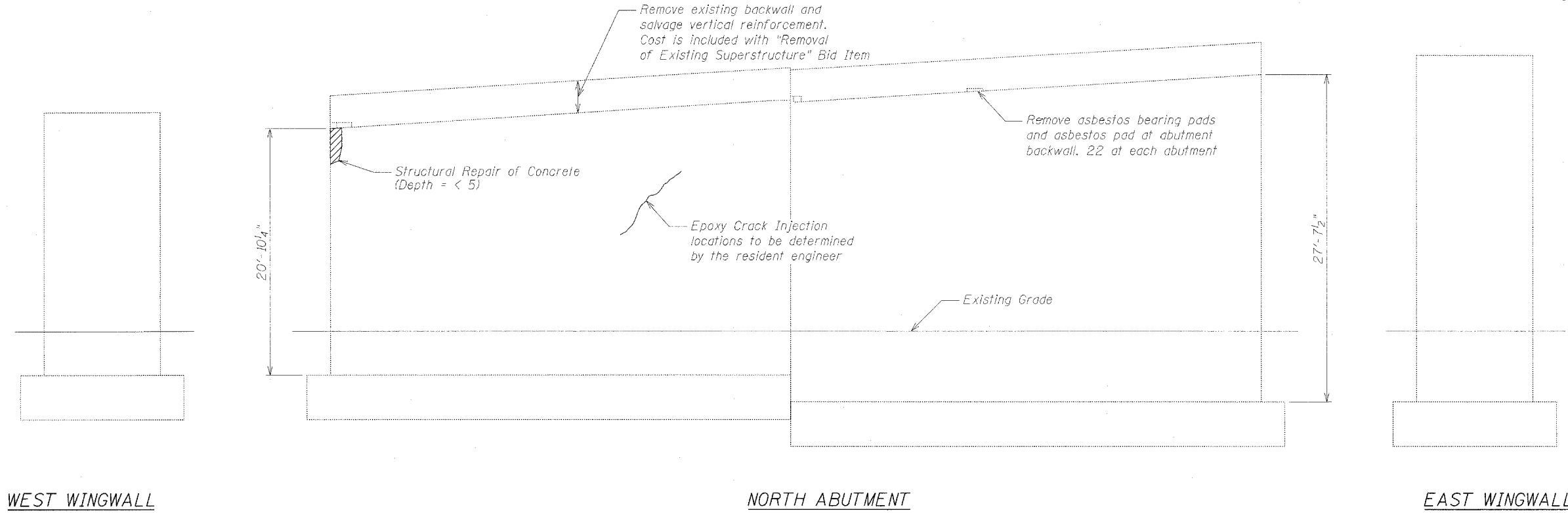
BSD-1

11-1-06

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 10
FAP 370	01031-2	COOK	27	18	10 SHEETS
FED. ROAD DIST. NO. 7	ILL. HIGHWAY	FED. AID PROJECT			

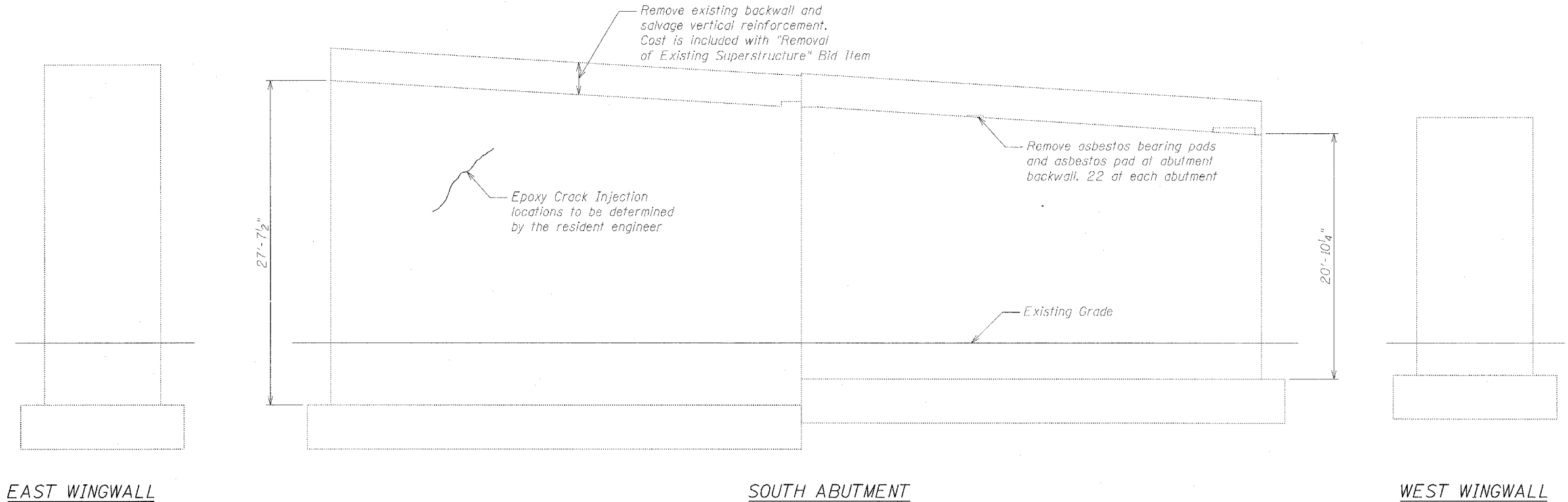
Contract # 62362



WEST WINGWALL

NORTH ABUTMENT

EAST WINGWALL



EAST WINGWALL

SOUTH ABUTMENT

WEST WINGWALL

NOTES:

Quantities for Structural Repair of Concrete (Depth < 5") and Epoxy Crack Injection are approximate. Locations will be determined by the resident engineer.

Actual repair locations shall be shown on the As-Built plans.

BILL OF MATERIAL

Item	Unit	Quantity
Epoxy Crack Injection	Foot	20
Structural Repair of Concrete (Depth < 5")	Sq. Ft	10
Asbestos Bearing Pad Removal	Each	44

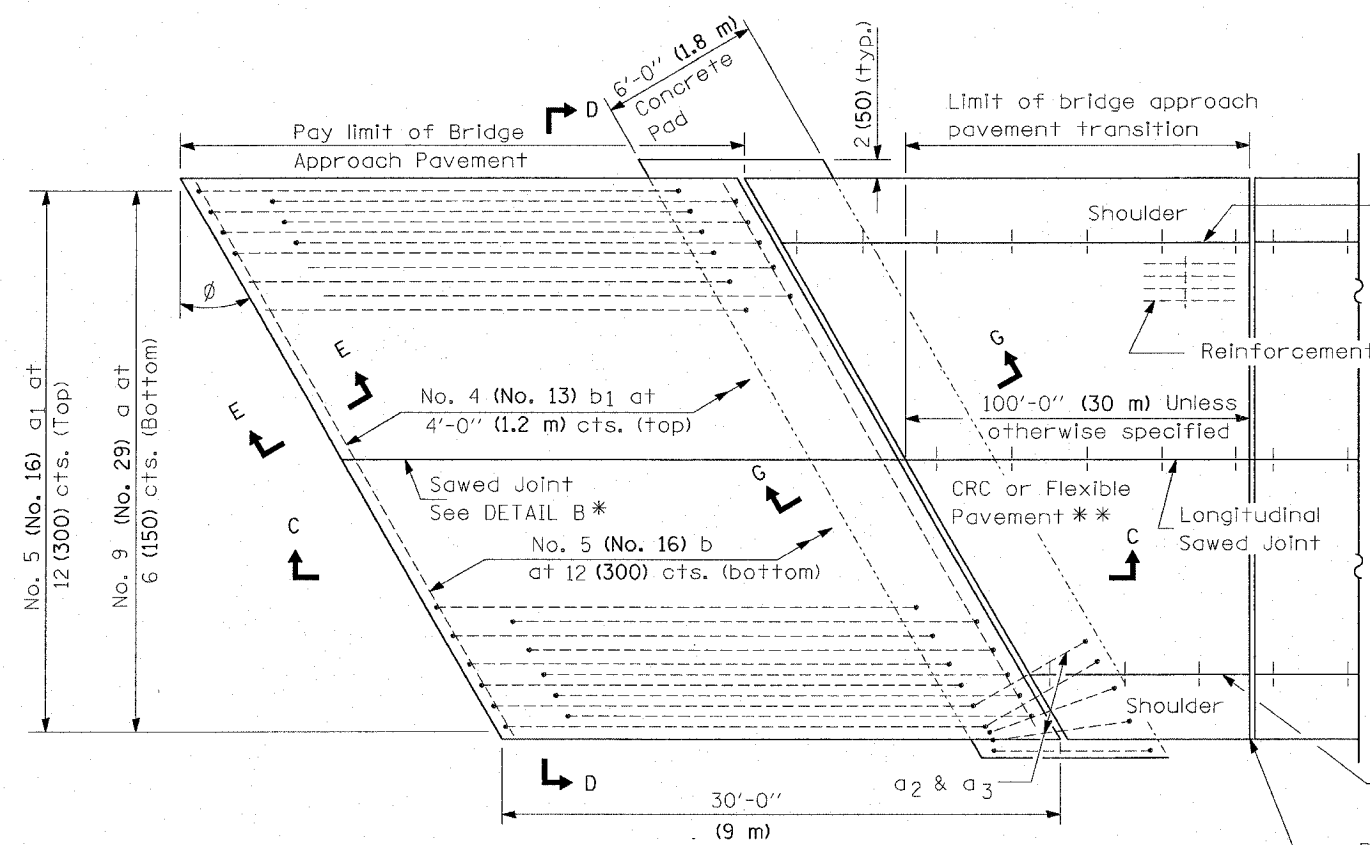
DESIGNED	JRS
CHECKED	AML
DRAWN	RBH
CHECKED	AML

SUBSTRUCTURE MODIFICATIONS
GREGORY STREET
OVER VERMONT STREET
SECTION 01031-2
COOK COUNTY
STRUCTURE NO. 016-0776
STATION 42+37.22

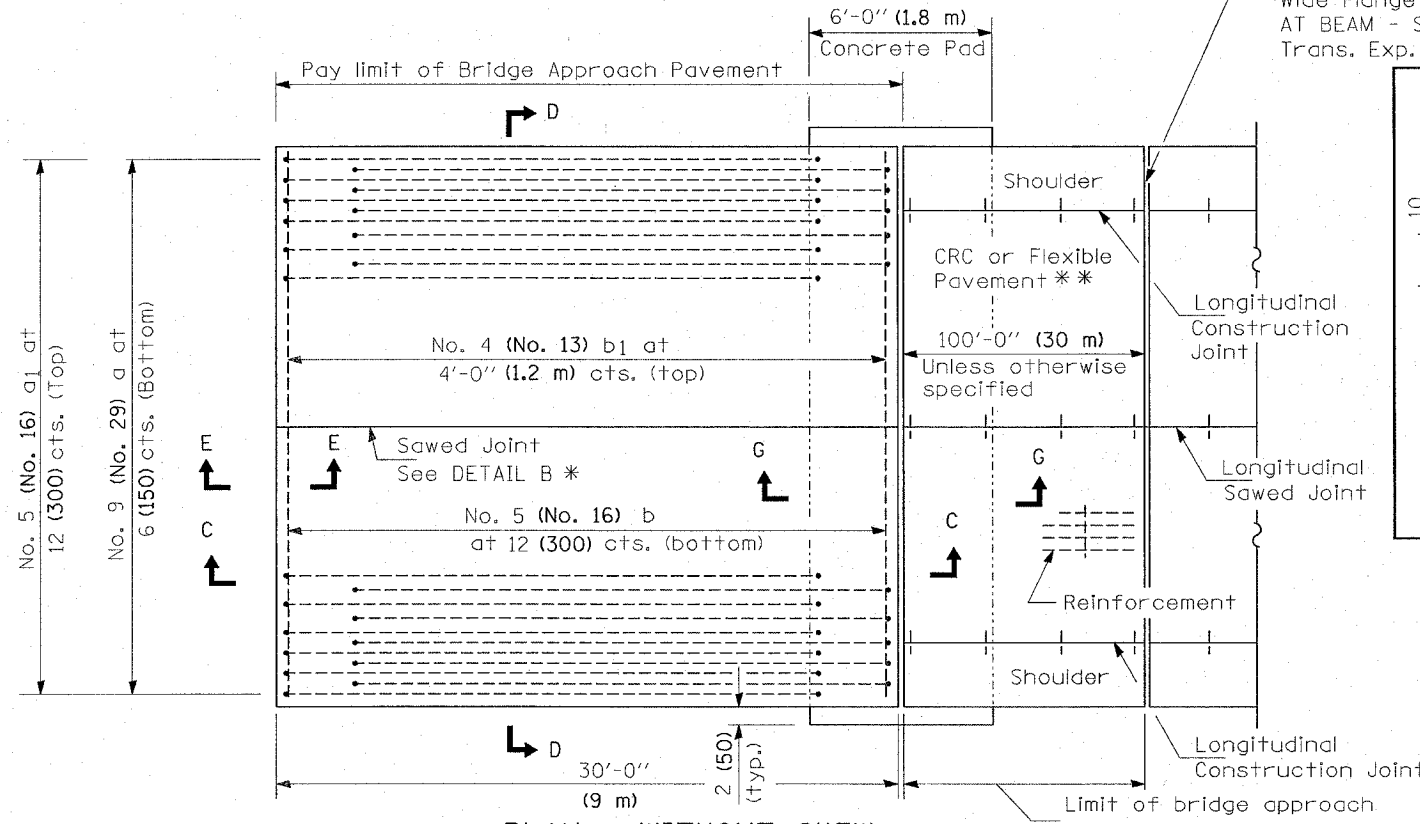
GRAEF ANHALT SCHLOEMER
CONSULTING ENGINEERS AND LAND SURVEYORS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0112

F.A. DIST. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103-1-2	COOK	27	19
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

NEW CONSTRUCTION

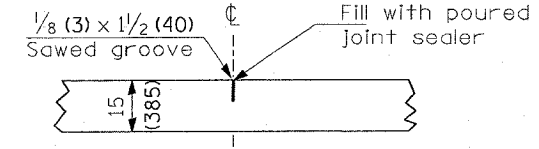


PLAN - WITH SKEW

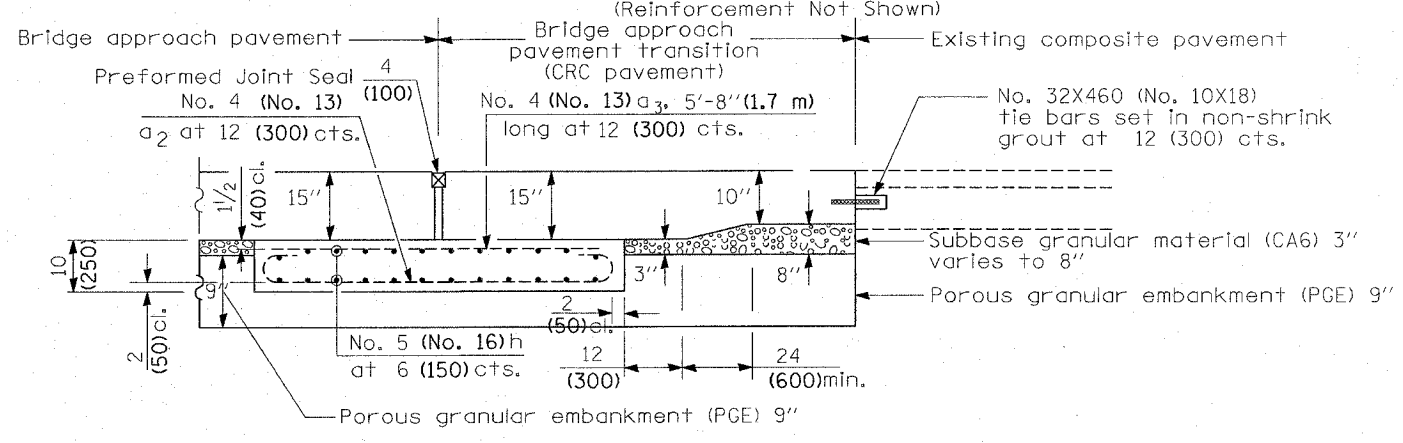


PLAN - WITHOUT SKEW

* Saw ϕ or lane edge if poured two or more lane widths at a time.
 ** Omit Reinforcement, tie bars and Long. sawed Jt. for Flexible Pavement.

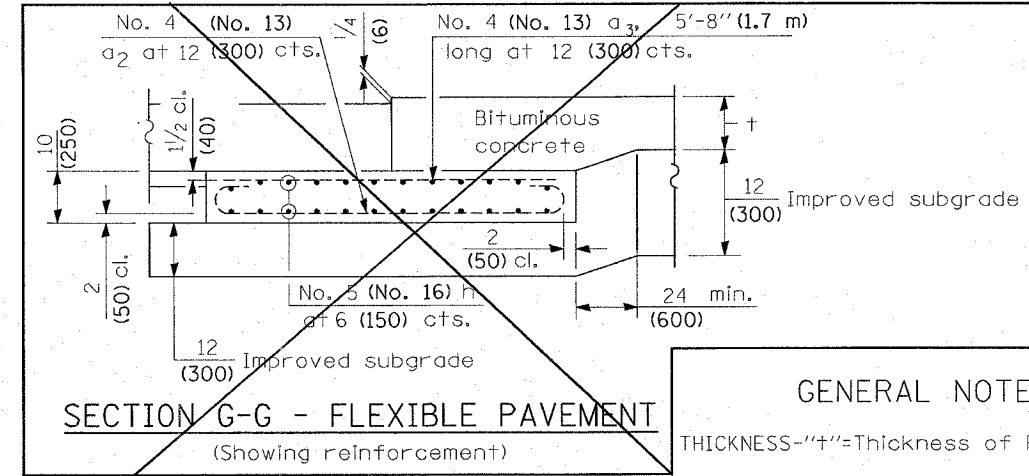


DETAIL B*



SECTION G-G - RIGID PAVEMENT
(Showing reinforcement)

Rigid Pavement only:
 Wide Flange Beam Terminal Joint (See DETAIL AT BEAM - Standard 421101 or 421106) or 2 (50) Trans. Exp. Joint as detailed on Standard 420001.



SECTION G-G - FLEXIBLE PAVEMENT
(Showing reinforcement)

GENERAL NOTES

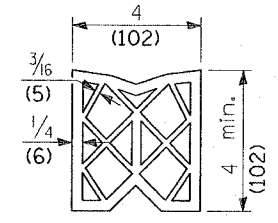
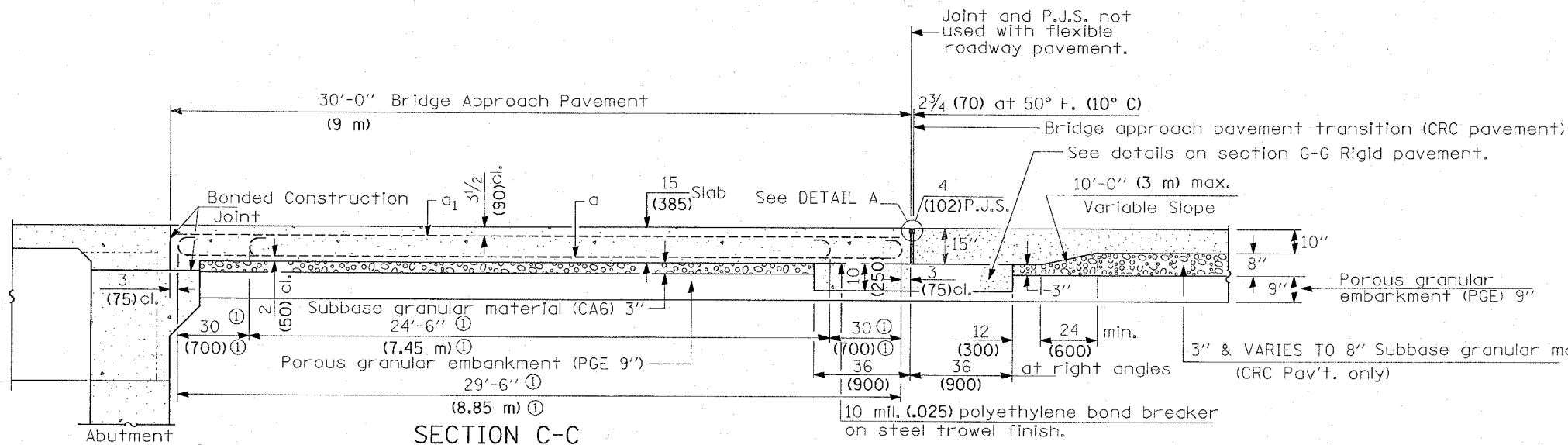
THICKNESS-"t"=Thickness of Pavement.
 See Standard 421001 for reinforcement details not shown.
 See Standard 420001 for joint details not shown.
 All dimensions are in inches (millimeters) unless otherwise shown.

REVISIONS	
NAME	DATE

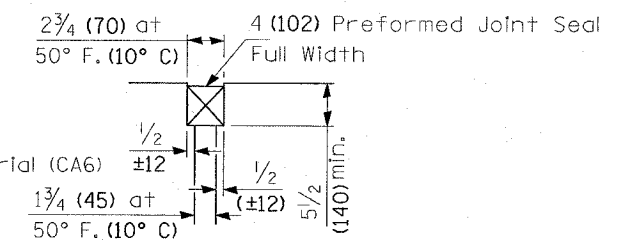
ILLINOIS DEPARTMENT OF TRANSPORTATION
 GREGORY STREET/ WESTERN AVE.
 BRIDGE APPROACH PAVEMENT
 DETAILS
 SCALE: VERT. _____
 HORIZ. _____
 DATE _____ DRAWN BY _____
 CHECKED BY _____

PLOT DATE = 8/17/2007
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 PLOT SCALE = 50.0000 / IN.
 USER NAME = grrakings

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103 I-2	COOK	27	20
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

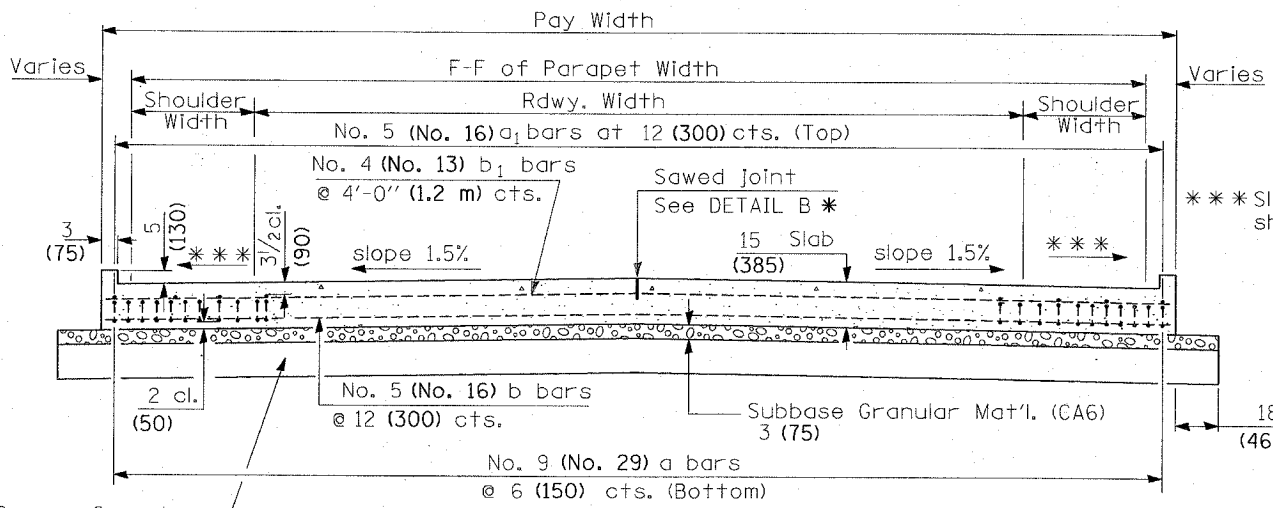


PREFORMED JOINT SEAL



DETAIL A

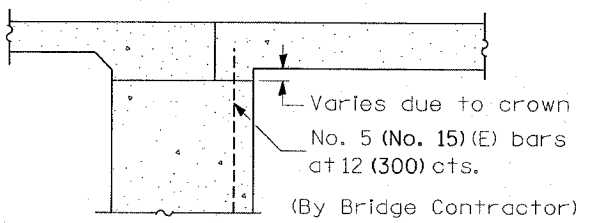
① Stagger No. 9 (No. 29) a bars as shown on plan - full width



SECTION D-D

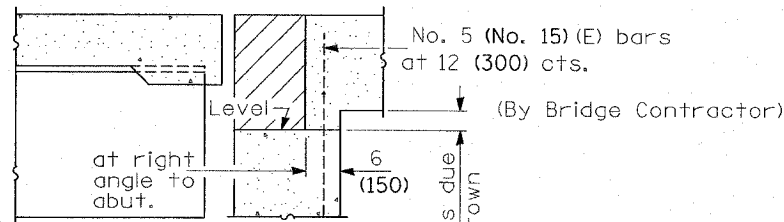
(See Plan for Dimensions not shown)
All reinforcement bars shall be epoxy coated.

Proposed Pourse Granular Embankment (PGE) 9 (225)



SECTION E-E

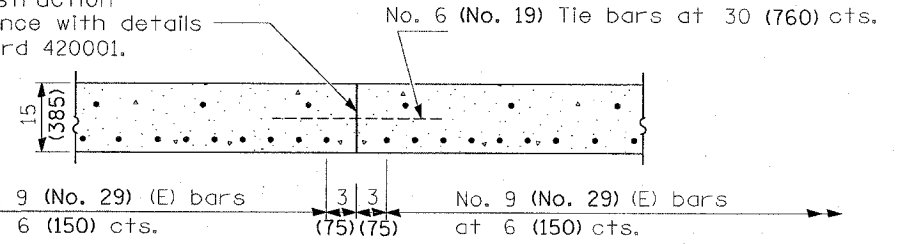
(Integral Abutments)



SECTION E-E

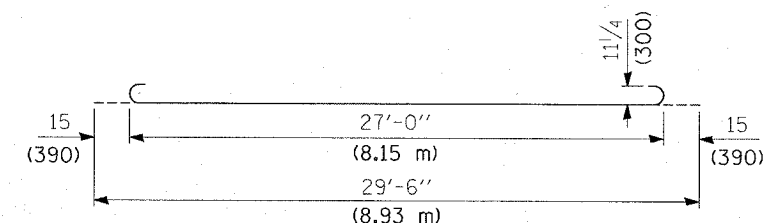
(Jointed Abutments)

Longitudinal Construction Joint in accordance with details shown on Standard 420001.

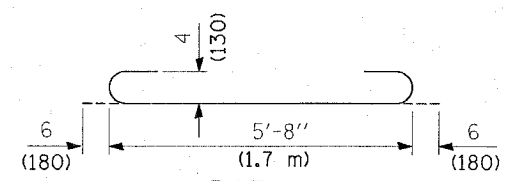


OPTIONAL LONGITUDINAL CONSTRUCTION JOINT

As approved by the Engineer, the Contractor may elect to reduce the widths of pour by use of the Optional Longitudinal Construction Joint shown. Joints shall be located at the edge of a traffic lane.



BAR a



BAR a2

All dimensions are in millimeters (inches) unless otherwise shown.

DESIGN STRESSES
 $f_y = 60,000$ p.s.i. (400 MPa)
 $f'_c = 3,500$ p.s.i. (24 MPa)
 $n = 8.5$

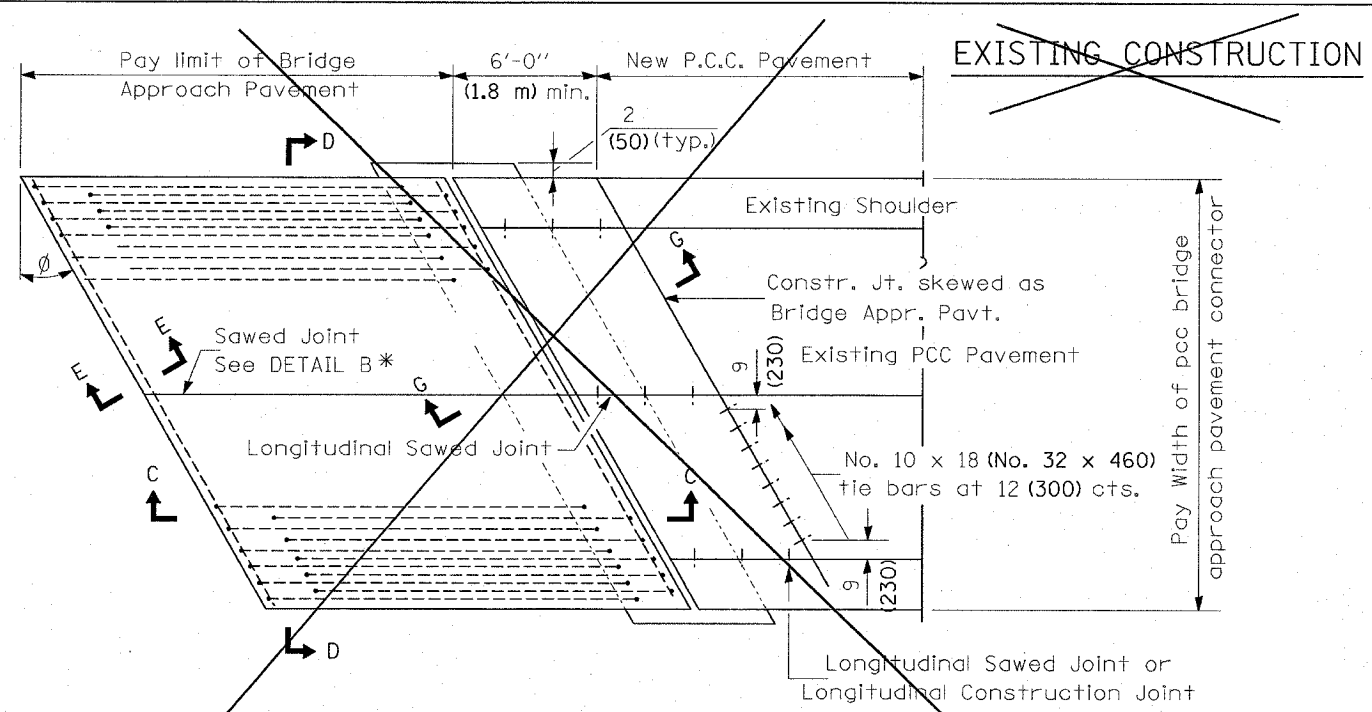
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 GREGORY STREET/ WESTERN AVE.
 BRIDGE APPROACH PAVEMENT
 DETAILS

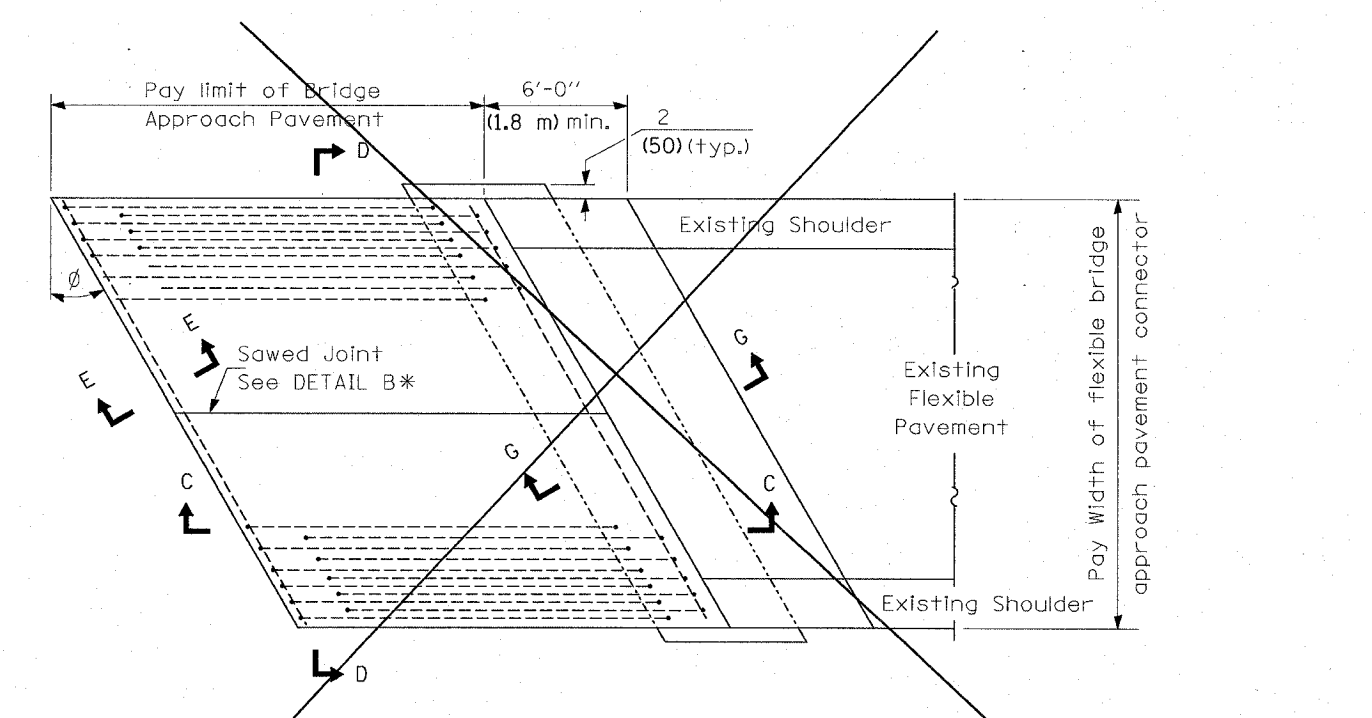
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 HORIZ. 1" = 20'-0"
 DATE: DRAWN BY: CHECKED BY:

PLOT DATE = 8/17/2007
 PLOT SCALE = 1/8" = 1'-0"
 USER NAME = drvkocngn

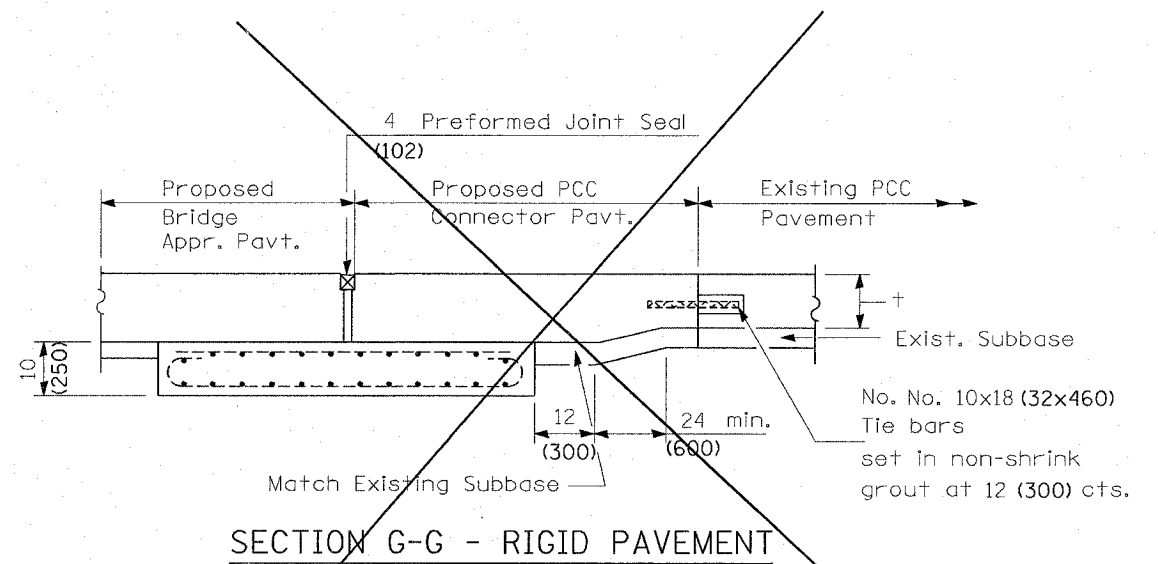
F.A.P. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103 1-2	COOK	27	21
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



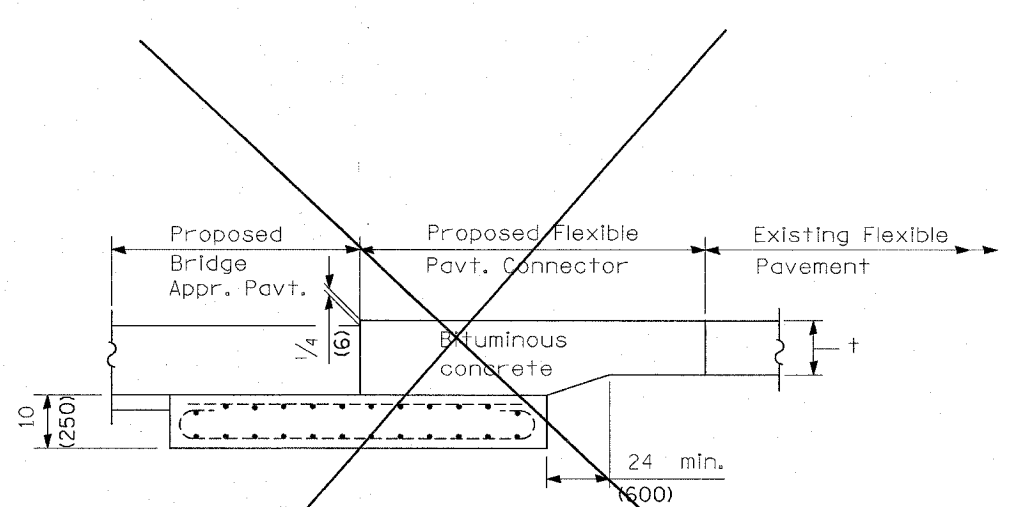
BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)



BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)



SECTION G-G - RIGID PAVEMENT



SECTION G-G - FLEXIBLE PAVEMENT

All dimensions are in millimeters (inches) unless otherwise shown.

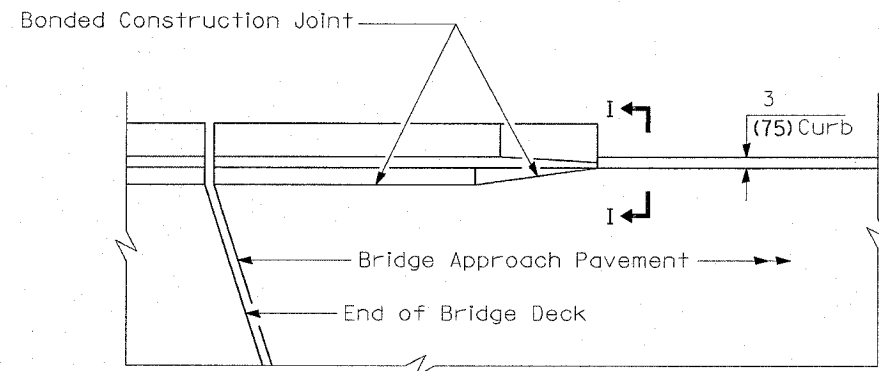
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 GREGORY STREET/ WESTERN AVE.
 BRIDGE APPROACH PAVEMENT
 DETAILS

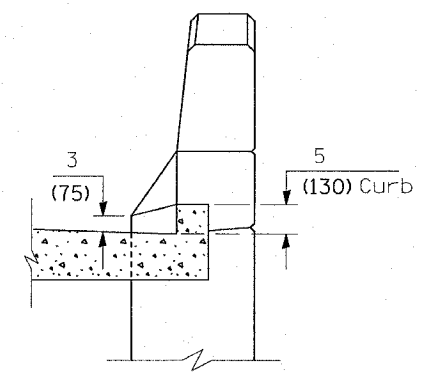
SCALE: VERT. _____
 HORIZ. _____
 DATE _____
 DRAWN BY _____
 CHECKED BY _____

PLOT DATE = 8/17/2007
 FILE NAME = 60103p01a1010102_ah.dwg
 USER NAME = drc

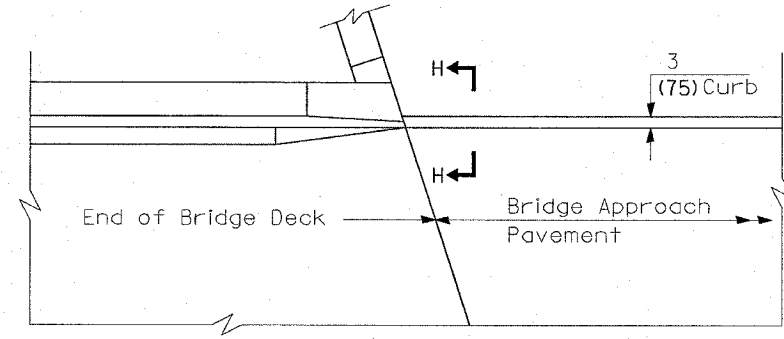
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103-I-2	COOK	27	22
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	



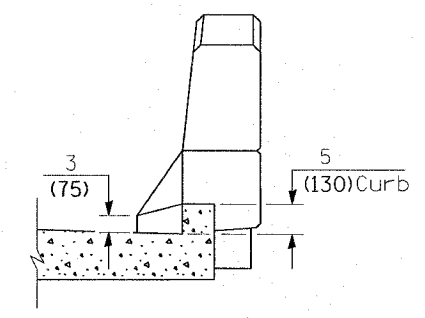
PARAPET TO CURB TRANSITION
PILE BENT ABUTMENT



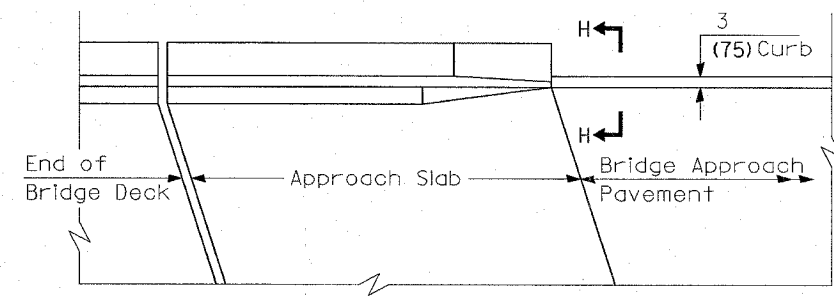
SECTION I - I



PARAPET TO CURB TRANSITION
INTEGRAL ABUTMENT



SECTION H - H



PARAPET TO CURB TRANSITION
VAULTED ABUTMENT

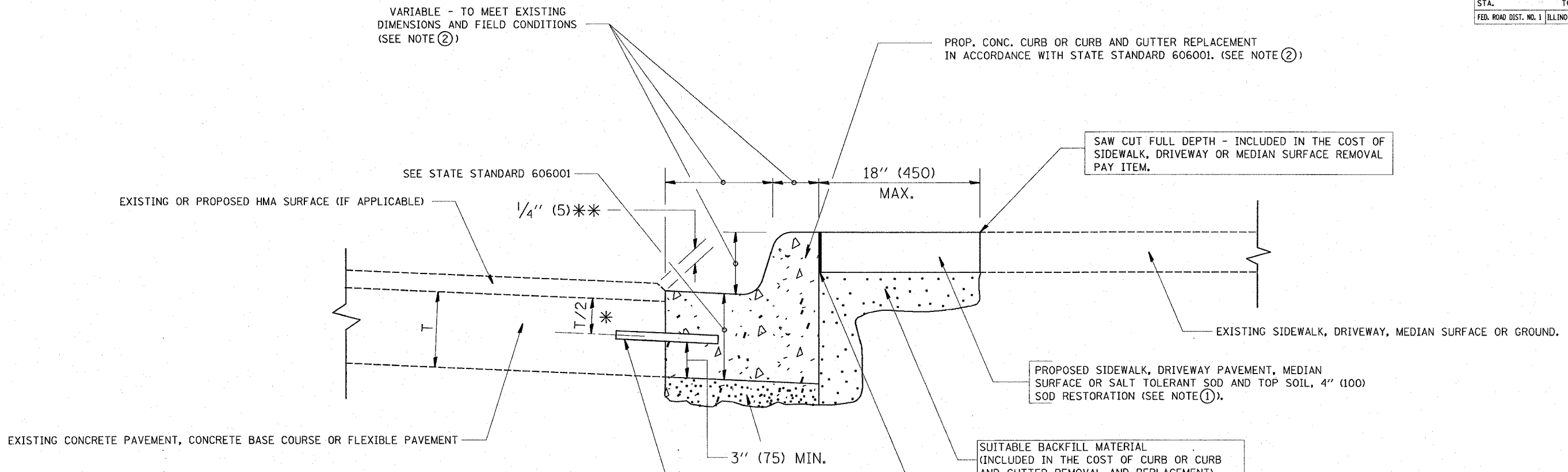
PLOT DATE = 8/16/2007
 PLOT SCALE = 1/8" = 1'-0"
 USER NAME = driveksgn

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 GREGORY STREET/ WESTERN AVE.
 BRIDGE APPROACH PAVEMENT
 DETAILS

SCALE: VERT. 1" = 4'-0"
 HORIZ. 1" = 20'-0"
 DATE
 DRAWN BY
 CHECKED BY

F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103 1-2	COOK	27	23
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- * 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
 - * * IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.
- NOTE:
- ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.
SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
 - ② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
 - ③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
 - ④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
 - ⑤ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
 - ⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
 - ⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

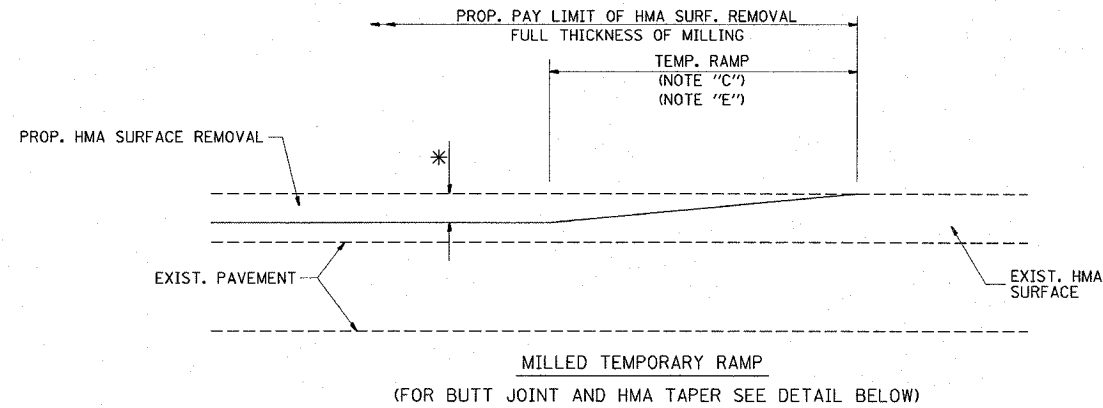
REVISIONS	
NAME	DATE
A. HOUSEH	03/11/94
R. SHAH	02/24/95
R. SHAH	03/02/95
R. SHAH	08/19/96
R. SHAH	09/12/96
R. SHAH	09/19/96
R. SHAH	10/03/96
A. ABBAS	03/21/97
M. GOMEZ	01/22/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

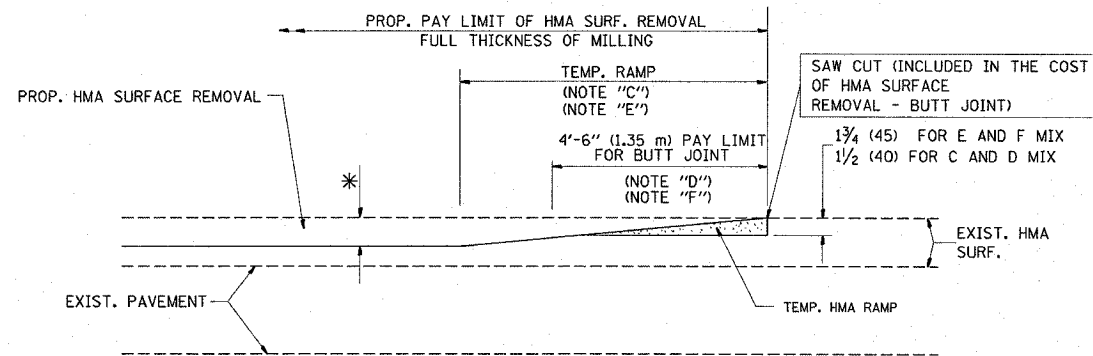
CURB OR CURB AND GUTTER
REMOVAL AND REPLACEMENT

SCALE: VERT. NONE
HORIZ. 1" = 4'-0"
DRAWN BY: [blank]
CHECKED BY: [blank]
PLOT DATE: 7/10/2007

CONTRACT NO. 62362				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103-1-2	COOK	27	24
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

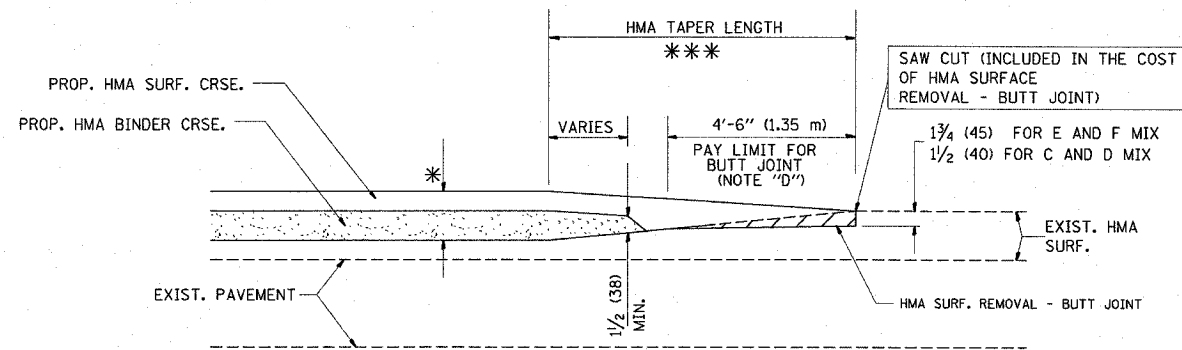


OPTION 1



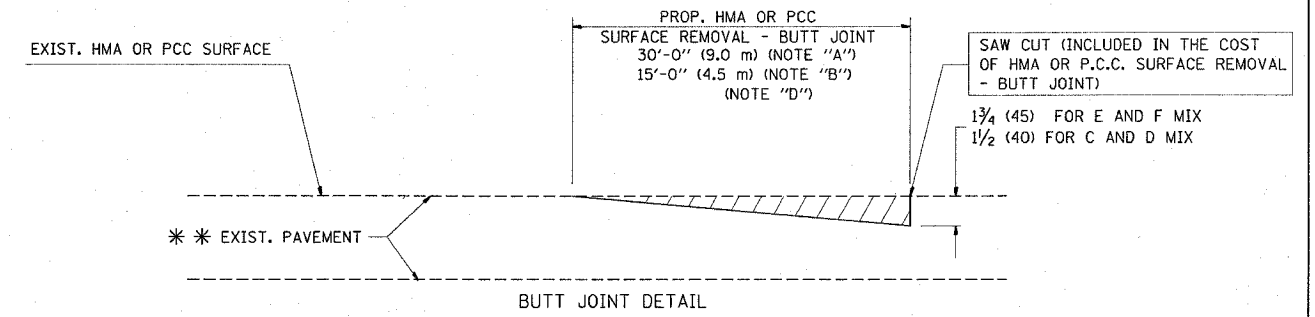
HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2
TYPICAL TEMPORARY RAMP

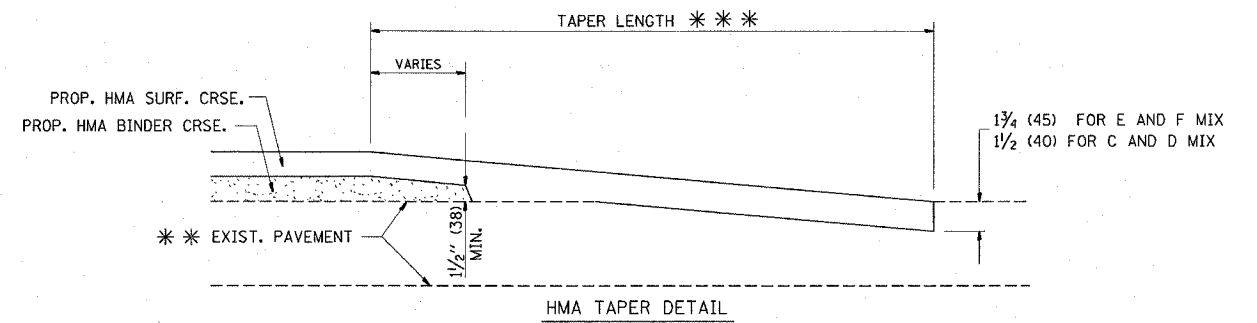


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER
FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER
FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

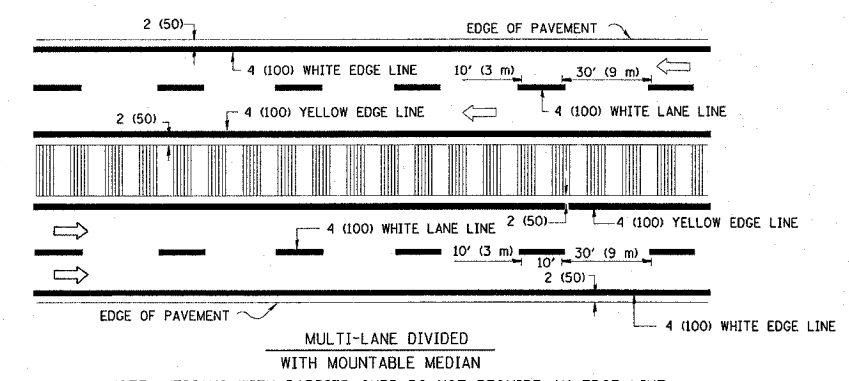
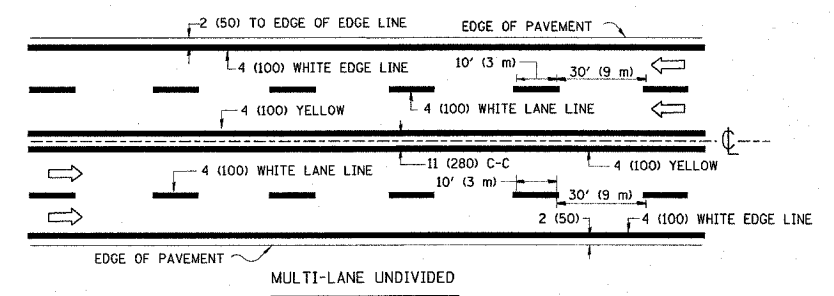
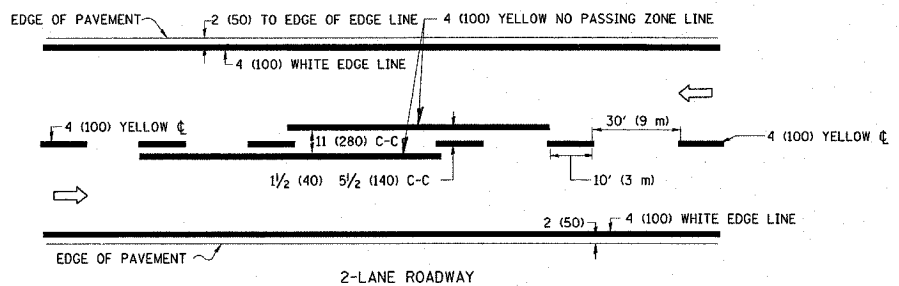
BUTT JOINT AND HMA TAPER DETAILS

SCALE: VERT. NONE
HORIZ. 1" = 10'
PLOT DATE: 6/27/2007

DRAWN BY
CHECKED BY

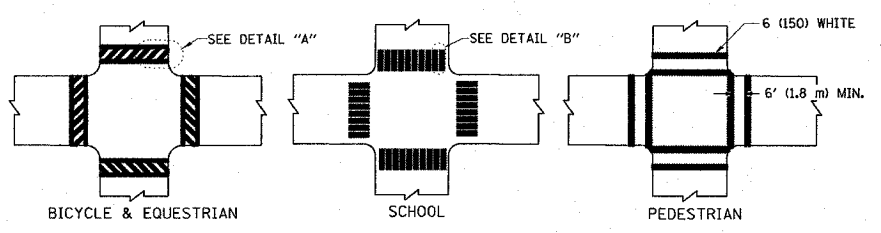
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REVISION DATE: 01/01/07

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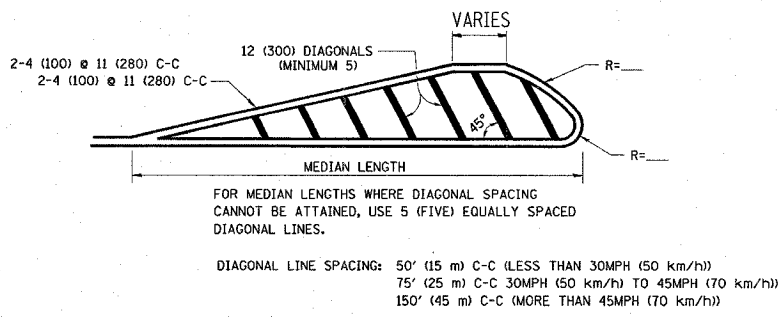
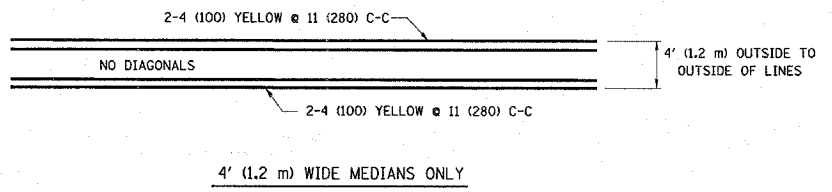


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

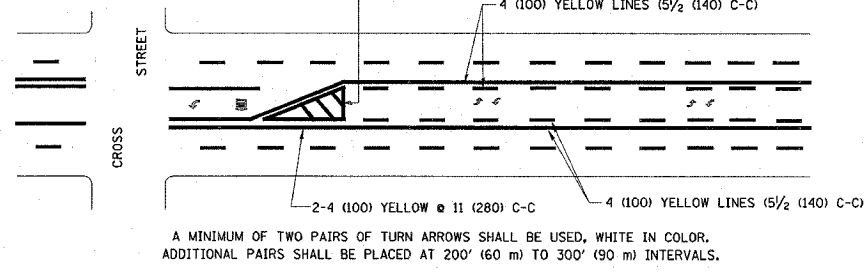


TYPICAL CROSSWALK MARKING



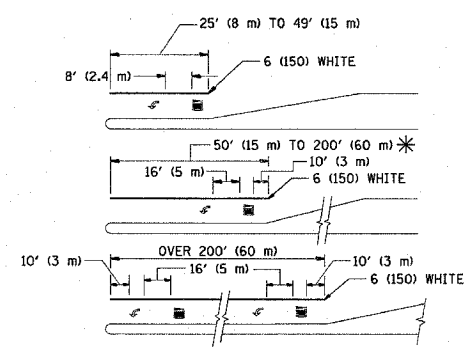
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
 DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

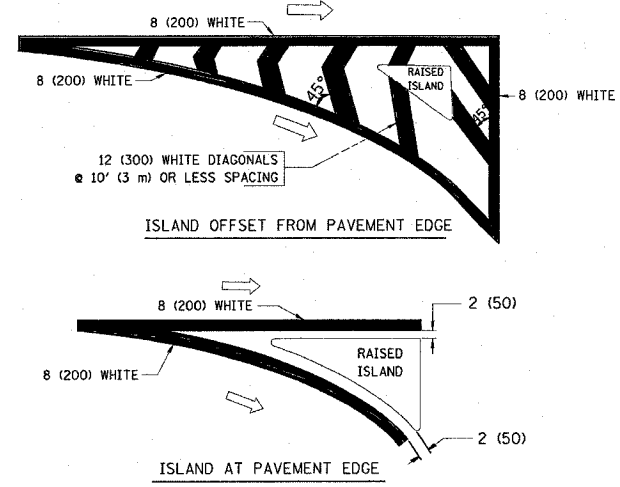
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 AREA = 15.6 SQ. FT. (1.5 m²) AREA = 20.8 SQ. FT. (1.9 m²)
 * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in millimeters (inches) unless otherwise shown.

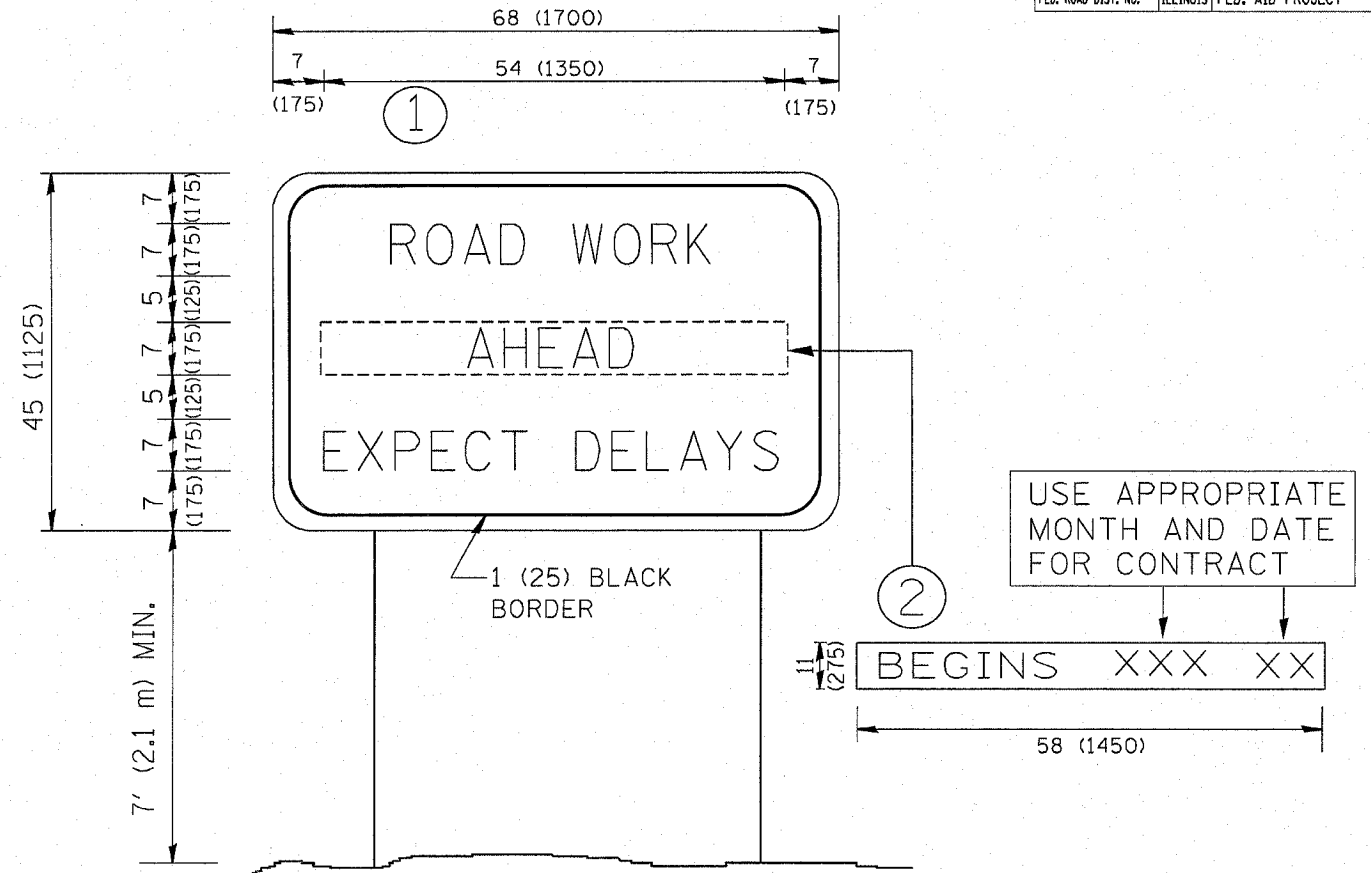
REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT ONE
 TYPICAL PAVEMENT MARKINGS

SCALE: NONE
 DATE: 6/27/2007
 DRAWN BY CADD
 CHECKED BY

PLOT DATE = 6/27/2007
 PLOT SCALE = 50.000 / IN.
 USER NAME = cmanahan

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	01031-2	COOK	27	26
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99
C. JUCIUS	1-31-07

ILLINOIS DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

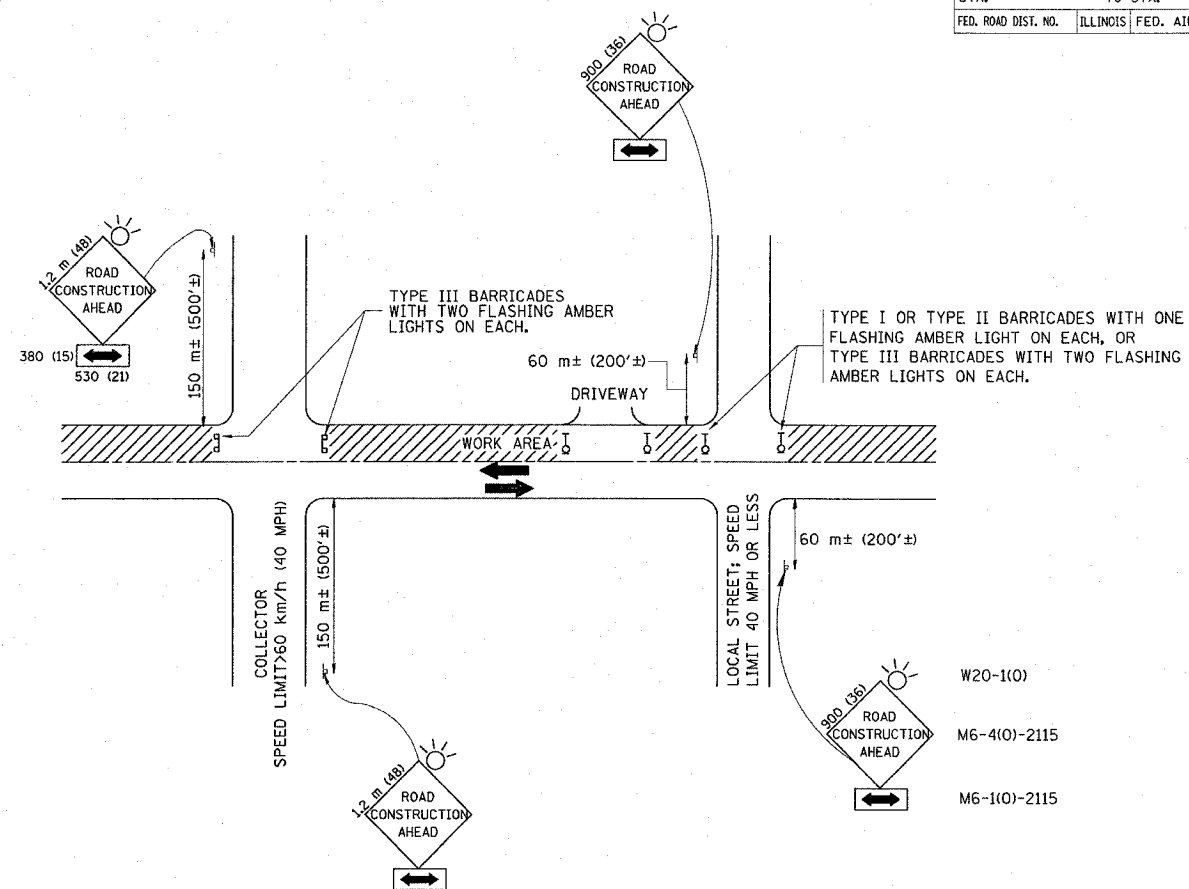
SCALE: NONE

DRAWN BY DESIGN

CHECKED BY

TC22

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
370	0103 I-2	COOK	27	27
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

- a) ONE ROAD CONSTRUCTION AHEAD SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

- a) ONE ROAD CONSTRUCTION AHEAD SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	03/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL AND PROTECTION
 FOR
 SIDE ROADS, INTERSECTIONS, AND
 DRIVEWAYS

SCALE:
 DATE: 8/28/2007

DRAWN BY
 CHECKED BY

TC-10

REVISION DATE: 01/06/00